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LECTURES
ON THE
DISEASES OF THE BONES AND THE JOINTS.

BY

ROBERT LISTON, ESQ., F.R.S.,

Surgeon of University College Hospital, and Professor of Clinical Surgery in University College, London.

LECTURE III.

Diseases of bursæ. Symptoms of inflammation from pressure. Organisation of effused lymph. Adventitious bursæ and ganglia. Treatment. Mode of forming openings in suppurated bursæ. Removal of ganglia. Wounds of joints and their results. Sprains. Abscess in joints, and symptoms. Dupuytren's "pyogenic membrane." Fatal articular suppuration not preceded by acute inflammation. Chronic diseases of joints. "White swelling" and its pathology. Tubercular disease in the heads of the bones. Diseased cartilage.

In the present lecture I propose entering on the consideration of *diseases of the joints;* but before doing so we may as well notice the affections of certain synovial cavities that are placed often in the neighbourhood of joints. I allude to the simple sacs of synovial membrane, called bursæ, which are seen between the skin and a prominence of bone, as over the patella and elbow, or between the tendinous parts of muscles and bones over which they play, as, for example, under the gluteus maximus, &c. These correspond in almost every respect with the membranes lining articular cavities, from which they differ principally in the greater simplicity of their form. In the natural state they are smooth and polished, and the movement of the surface over one another is favoured by a small quantity of glairy fluid which they contain. They are subject to inflammation from ordinary causes, as bruises or wounds, but perhaps they most frequently suffer from long-continued pressure.

When this is the case the part is found painful and tender on pressure, and the cyst becomes enlarged, owing to an increased secretion of synovia, which, as yet, is of its natural appearance and composition. If the irritating cause cease, and the part be kept at rest, &c., all this may subside, and the secretion be again reduced to its natural quantity. But if the original cause of inflammatory action continue coagulable lymph is thrown out, and the nature as well as the quantity of the secretion undergoes an alteration. This lymph may be thrown out on the internal surface of the membrane, causing it to assume a rough and flocculent appearance; and it may be effused into the cellular tissue around the cyst, producing at the time thickening and induration in the neighbourhood of the bursæ, and perhaps laying the foundation for future abscesses. If inflammation run still higher the nature of the secretion contained in the bursæ is still further altered. It becomes purulent, and the cyst is converted into an abscess. Suppurative inflammation may also go on in the surrounding cellular membrane, and the pus thus formed may burrow under the skin, and find its way on each side of the joint, complicating the case considerably.

Again, the inflammation in a bursa may not lead to suppuration, but continuing for some time, it may terminate in the organisation of the coagulable lymph which has been effused in the interior of the cavity. New vessels are formed, more lymph is thrown out, and ultimately the whole is converted into a solid fleshy tumour, which is hard and unyielding to the touch, and no longer gives the sensation of fluctuation when pressure is made with the fingers on each side alternately. These different terminations of inflammation in synovial bursæ are often seen in the case of the bursa patellæ, in what is called "housemaid's knee." They may also occur in bursæ more deeply seated, as under the deltoid, &c., and here they are of more serious consequence, and will not bear the same degree of active interference as the subcutaneous bursæ.

Again, we sometimes meet with tumours of a similar kind to that of housemaid's knee in situations where bursæ do not natu-

rally exist; for, whenever pressure is continued for a long while on one particular point, a bursa is almost sure to be formed by a change in the filamentous tissue. You may thus meet with adventitious bursæ over the outer ankle of tailors, over the spinous processes of the vertebræ in cases of sharp incurvation or gibbosity, as it sometimes called, under troublesome corns, over the inner side of the metatarsal bone of the great toe—bunion, the prominence of the instep, and on the point of the chin in bootclosers, &c. Large and remarkable bursæ are found placed under the cuboid bone in cases of ordinary club-foot, when the deformity has not been remedied, as it ought to be, in early life, and the individual has continued for a series of years to rest, in progression, on the outside of the foot. Betwixt the thyroid cartilage and os hyoides a bursa is sometimes found distended from the effects of inflammatory action. This, there is reason to believe, however, is not always an adventitious formation. The most remarkable adventitious bursa I have met with was seated betwixt a hard, cartilaginous, earthy, or bony growth which was seated on the inner aspect of the os calcis, and had been gradually increasing for some time till it had attained the size of a filbert. It was so placed that the edge of the shoe interfered with it. It was cut out, and under it was found a perfect synovial membrane, in fact a sort of joint to permit of its motion before the pressure of the shoe in progression,—a beautiful instance of what nature will do in untoward circumstances, and as it were to get out of a false position. The preparation is on the table for your inspection after lecture. These are all subject to the same changes on inflammation attacking them as the natural bursæ, and then you are made acquainted with their existence, perhaps for the first time.

There is a similar kind of tissue, of a somewhat different form which occurs in the sheaths of tendons, particularly about the back of the hand and wrist. These tumours, which are called *ganglia*, are often of considerable extent, reaching under the annular ligament, and again swelling out into another hard lump on the opposite side of it. They sometimes even extend along the forepart of one or more fingers. They are sometimes met with on the dorsum of the foot, where I have seen them covering a large space and connected with the toes. When closely examined they are found to contain a thick, glairy fluid, and often a great number of curious little bodies, like mustard-seeds, or even larger, composed sometimes of cartilaginous and sometimes apparently of bony matter.

The precise nature and mode of formation of these bodies is by no means clearly made out. Some suppose that they are first developed in the substance, others on the inner surface of the synovial membrane; that they then hang by a small pedicle, which ultimately is removed by absorption, and that they are thus let loose into the cavity of the cyst. It is difficult, however, to understand how so many of these little bodies should be detached in this manner at the same time, as they are all about the same size.

We are not often afforded opportunities of examining cysts of this kind. I lately found in the bursa under the flexor brachii of a donkey many bodies of this kind loose; others, again, attached by very minute filaments to the synovial surface. The membrane otherwise appeared quite healthy. The small globular tumour (to which the term ganglion has been more generally applied) about the wr st, dorsum of the foot, fingers and toes, are in their early stage easily got rid of by such firm and sudden pressure as will cause their rupture. Their glairy contents are effused into the cellular tissue, and thence rapidly absorbed, whilst frequently the cyst is obliterated, or, at all events, the secretion is put a stop to. In their more advanced state, when the cyst is firm and resisting, the fluid may be effused by the introduction of a flat needle to its opposite side, and by gentle pressure. This practice is applicable even to large collections.

Treatment.—In simply inflamed bursæ the treatment should be strictly antiphlogistic. The limb should be kept elevated and perfectly at rest, the affected part relaxed, and in the easiest possible position; leeches applied pretty freely, together with hot fomentations, and when the active symptoms have abated the part may either be blistered or only supported and gently stimulated by means of a common gum-plaster. In more chronic cases abstraction of blood from the part may not be advisable. In such cases the use of counter-irritation is more indicated. Thus the skin over the bursa may be frequently blistered, either by cantharides-plaster or by rubbing nitrate of silver over the moistened part; some, again, paint over the swelling with a strong solution of iodine in spirit, with the view of exciting counter-irritation and promoting the absorption of the synovia. Where, however, the case is of long standing, the shortest and best method is that of passing a seton through the sac, and leaving it until suppuration is established and the cavity begins fairly to be closed by granulations. This may be done by means of a straight narrow bistoury and eye-probe, the latter being passed along the blade of the former, and, after being armed with silk, withdrawn. After a few days the glairy fluid, which is first seen, gives place to healthy pus, and then in a short time you may begin to withdraw the seton, thread by thread.

When the bursa suppurates of its own accord (from some slight additional injury,

perhaps, whilst the part is inflamed) you must not be contented with the above treatment, but must make the necessary openings to allow of the evacuation of pus. These openings are, generally, most advantageously made on each side, at the most depending points of the cyst, for this reason, that the matter by its gravity constantly runs out instead of collecting at any part and requiring a subsequent incision. In those cases in which abscess has occurred in the tissues surrounding the cyst, as well as in the cavity of the synovial membrane itself, you may be obliged to make one or two more openings, always, however, on the same principle of letting them be at the lowest point. By this means the pus constantly drains off, the surfaces adhere together, and the sinuses, which have previously burrowed under the skin, are closed up. There is never any occasion for opening these sinuses, as some would do, in a transverse direction across the knee; and, moreover, if this be done an exceedingly troublesome wound is left, for, as you know, all wounds made in such a direction are more slow in cicatrising than those made in the direction of the fibres and of the limb. Lastly, when a bursa becomes converted into a solid tumour by the deposition and organisation of lymph in its interior, or even when the coats of the cyst become extremely thick and tough, as they often will when exposed much to pressure, the shortest method, and the only one likely to be of any benefit, is to dissect it out altogether, as you would a fatty tumour. A simple incision over the cyst is sufficient, and the parts adhere generally by the first intention, when brought together neatly, after all bleeding has ceased, and all coagula have been removed from the wound. With regard to the large bursæ which are found under the shoulder, &c., I never like to meddle with them much. I have seen dangerous suppuration, and even death, in consequence of attempting to treat these as you would an inflamed bursa patellæ. If you determine on puncturing them the opening should be very small, and the patient should be kept very quiet for some time afterwards in order to prevent inflammatory action (which may come on) from getting suddenly too strong for the patient's safety.

The adventitious cysts which form about the wrist and ankle, and are called ganglia, are sometimes removed by the knife, but this is scarcely ever necessary. If the cyst can be opened in any way so as to allow the fluid to pass out into the surrounding cellular membrane, it will become absorbed, and the cyst itself will close, and probably never fill again. In recent cases, when the walls of the cyst are not very strong, firm pressure with the thumb is sufficient to burst the ganglion, and in other cases a smart blow from a book, or some other heavy body, is necessary to effect the same purpose. Sometimes, however, this cannot readily be done, and then it is as well to open the cyst at once by subcutaneous puncture. A needle, such as is used for dividing tendons, may be passed under the skin, through the cyst, and then moved from side to side, so as to lacerate the walls completely. The instrument is then withdrawn, and the finger being placed over the puncture the fluid is pressed out into the cellular tissue.

We may now pass on to inflammation (and its consequences) in the *synovial membrane of joints*. The joints are often inflamed in persons of all ages and constitutions, and though they may become affected from such slight causes in some persons as to lead to the conclusion that they are brought on by constitutional derangement only, they are generally diseased in consequence of exposure to cold, or to some injury, such as a wound, a bruise, sprain, &c. *Wounds* of the joints are so frequently followed by inflammatory action of a severe nature, that it is very rare, indeed, for what is called "an open joint," to be recovered from without the loss of the limb, or at the best a considerable abridgment of its natural motions. These wounds, when the result of accident, are generally more or less in a transverse direction to that of the limb, and are often attended with bruising of the skin and soft parts, all which renders union by the first intention difficult, if not impossible. Nay, even when the wound is made in the direction of the limb, with the finest edged instruments, as in the old-fashioned operation for extracting loose cartilaginous bodies from the knee-joint, we often see how difficult it is to effect perfect union, and prevent inflammation and suppuration from taking place. In small punctured wounds, also, even those made by as fine an instrument as a needle, it is extraordinary how frequently severe inflammation of the joint follows. Some have proposed in cases where a joint has been opened, to produce closure of the opening by the application of the actual cautery, but I believe this to be an absurd proceeding. The only chance for the patient is to bring the parts together as well as you can, and then keep the joint cool and *perfectly* at rest, neither allowing the patient to disturb it, nor being anxious yourself to examine it further.

Sprain, again, which consists in a partial dislocation of a joint, with stretching, and perhaps laceration, of the ligaments, and effusion of blood around, is often the commencement of acute synovitis, which is itself the forerunner of more serious mischief. Even slight sprains will sometimes be attended with much more important ultimate consequences than the amount of inflammation at first excited might lead one to expect. But enough of the causes of inflammation of joints. Now, when this is

once established there is great pain, heat, and throbbing complained of in the articulation, which is swollen, œdematous, and red. It is also very tender on pressure, and the pain is much aggravated by motion. There is effusion into the cellular tissue round the joint, and perhaps, after a time, in the cavity of the joint itself, so that there is puffiness on each side of the patella, and fluctuation can be felt. All this is accompanied with considerable inflammatory fever and derangement of the functions generally, and, indeed, there is hardly any surgical affection in which this is more evident than in the one now under consideration. At this period, if the joint could be examined, the synovial membrane would be found in a red, swollen, vascular state, and the synovia in larger quantity than natural.

If inflammation increase, coagulable lymph is effused from the vessels in the membrane, flakes of fibrine float in the synovial secretion, rendering it turbid, and patches of the same substance adhere to the sides of the cavity, are speedily permeated by new vessels, and become regularly organised.

If inflammation run still higher, secretion of pus must ultimately take place, and then the joint is converted into a true abscess. This termination is very rapidly arrived at when wound of the joint is the exciting cause. When this is the case the joint has generally a very peculiar appearance. It is swollen, and the swelling is globular, owing to the filling out of all the hollows and the consequent hiding of the natural prominences which give form and character to the articulation. Fluctuation, also, of the collected fluid, is readily felt, particulary at the opposite sides of the patella. The limb, also, is slightly wasted, in all probability, and the wasting takes place very quickly in a diseased limb, which makes the size of the joint appear greater by contrast. With respect to the secretion of pus in joints, it has been said that before this takes place the epithelium is thrown off the synovial membrane, leaving a raw surface to form matter. However, this may be, you will find that it is the fibrin from the vessels, effused and organised, which, for the most part secretes the purulent matter, as in other abscesses.

Dupuytren has considered that the coagulable lymph in abscesses is not much concerned in the formation of matter. He considers it to be a foreign substance, and supposes the suppuration to proceed from the surface of a fine membrane lining the whole cavity. This is called the "*pyogenic membrane.*" If, however, you examine the plastic matter, when successfully injected, under a good microscope, you find it very abundantly supplied with looped vessels, which are the real source from which pus is produced. The lymph, indeed, has the same arrangement of capillary vessels that we see in all secreting tissues.

When abscess has formed in a joint the mischief proceeds with greater rapidity; the synovial membrane and cartilage are ulcerated, the ligaments softened and elongated, and, in short, the whole apparatus becomes disorganised by the implication of the other tissues in disease.

Now all these results, which we have described as the consequences of severe acute inflammation of the synovial membrane of a joint, may occur in several joints at a time, without any symptoms of acute inflammatory action. Thus, a patient who has suffered severe constitutional disturbance from long-continued discharge, or has been subjected to some operation, is suddenly attacked with shivering and difficulty of breathing; complains of pains in several of his joints, with, perhaps, some degree of tenderness; falls into a very low and typhoid state, and rapidly sinks and dies. After death, on examining the body, pus is found in the joints in which pain was complained of. The presence of this matter in joints is difficult to account for, and it has been supposed that it is somehow caused by inflammation of the veins, though this does not appear to be always the case. Some of the veins are found filled, in such cases, with pus, but, at the same time, there is frequently no sign of inflammation having existed in their coats. The pus is probably taken up from the original suppurating surfaces or cavities, gets into the circulating mass of blood, and is deposited from thence in the solid internal viscera as well as in the joints. Now, in these cases, I have said that ulceration of the cartilage quickly takes place, so that it may be stripped almost entirely off the heads of the bones, and that without any of the usual acute symptoms of such an occurrence.

In the next place, with regard to *chronic* diseases of joints. You sometimes find an enlargement of a joint of a chronic kind, depending on extensive effusion of synovia merely. There is no tenderness, no heat or redness, there are no signs of inflammation, and the secretion is in all respects healthy in quality. This curious affection (called hydrops articuli) may sometimes be seen to a great extent in the knee, the synovial membrane being so full of fluid as to extend far up the thigh under the vasti muscles. In these cases fluctuation is very distinct and the patella is felt floating on the fluid, borne up by the distended synovial sac, and requiring some pressure to make it touch the condyles of the femur. This is a very obstinate affection, and very difficult to treat. The patient does not feel much pain from it; the chief complaint is from the weakness of the limb.

Chronic inflammation, in various degrees, often affects joints. The patient either does

not know any cause for it or he refers the commencement of the affection to a distant period, when, perhaps, he received some injury and experienced some inflammation, which was not completely subdued before he was allowed to exercise it. If it be in the knee he does not suffer much pain, perhaps, except when he attempts to walk or rest his weight on the limb. He halts, therefore (if the knee be the joint affected), and favours the limb by keeping it slightly bent. This may have become a habit, and the patient complains of his "sinews being contracted." On examining the knee you find the same uniform globular swelling noticed in acute inflammation; but there is not so much tenderness, and the skin is not discoloured. Often, indeed, it is paler than usual, owing to the accompanying œdema, &c., which has induced persons to name the affection "*white swelling*." The joint, when handled, feels puffy and boggy; fluctuation can be felt at the sides of the patella, and, perhaps, matter may also be detected under the skin at one or more points. There is, besides, in most cases of long standing, an unnatural degree of motion in the joint, particularly in the lateral direction, where there ought to be none. This depends on the diseased state of the ligaments, which become softened and sodden even in severe cases of acute inflammation of joints. Another point which you will notice is the wasting of the limb above and below the joint. This depends on the want of exercise of the muscles; for, owing to the stiffness and pain on motion of the affected part, the patient is unwilling to use it more than he possibly can help. This state of the joint may continue for some time, till circumstances hasten on the mischief. Abscess may then form under the skin, and when that is opened, or when it bursts of its own accord, a clear glairy fluid is seen to run out, together with pus and a curdy matter. The constitution now suffers more; hectic fever supervenes, and the patient either loses his limb or succumbs under the constant and profuse discharge.

When you have the opportunity of examining the limb you may find, even after this long continuance of disease of the joint, that the synovial membrane is (if we except the ligaments) the only part diseased. You find it thickened, spongy, often pulpy, and having flakes of organised lymph on its surface, the vessels of which secrete the purulent fluid. You may also discover, with attention, the opening in the ligaments, communicating with the external abscess, through which the glairy fluid has escaped. In most cases this is not all. The cartilage *may* remain entire for a long time; but when the case draws to a conclusion the patient is frequently observed to suffer more acute pain, particularly when the joint is moved or one bone is pressed or rubbed against the other. If, also, a careful examination be made once for all, for it is attended with the most severe suffering, a grating sensation may be felt when the articulating surfaces rub over one another. This shows that the cartilage has become affected and removed by ulceration, and, accordingly, on dissection, you observe that the edges of that tissue, and other parts of it even, are rough, as if eaten away. How and by what means this process is effected I shall soon have occasion to speak about.

Hitherto I have spoken of disease of the joints only as the consequence of inflammation of the synovial membrane; but you are not to suppose that that membrane is in all cases the first tissue to be affected. Far from it; disease may commence in the synovial membrane, or in the bone, or in the cartilage, although, in most instances, the other tissues become, after a longer or shorter time, secondarily implicated. Thus a joint may become disorganised in consequence of disease of the *heads of the bones* composing it. Tubercular matter, for example, may be deposited in the cancellated structure; the end of the bone swells, and the patient experiences pain and stiffness of the limb, which gives way somewhat when he uses it. If the matter become softened the patient suffers more severely, and if, as sometimes happens, the abscess of the bone opens into the articulation, the agony is dreadful, and the joint is rapidly destroyed in all its parts.

Again, *cartilage* is sometimes the part primarily affected. Pain, very acute and constant, is felt in a joint, worse at night and much aggravated by motion, and this may continue for many weeks, and even months, without any apparent deformity or alteration in the contour of the joint. It depends originally on inflammation of the articular cartilage, which is swollen, vascular, and tender on pressure. After a time, however, as in other cases, the other tissues of the joint become involved in the disease, and swelling, with the other attendant symptoms that I have mentioned, is seen.

Thus, then, you observe how disease of the joints may be brought about in *different ways*, although they terminate by assuming much the same character in *all* instances. In many cases, when the disease is brought to you in an advanced state, it is quite impossible to say what tissue was first at fault; but you may sometimes, by questioning the parties closely on the history of the symptoms and signs,—finding whether swelling or pain was first observed and so forth,—form some idea of the real nature of the affection in the first instance.

Danger and Flandin have found that in poisoning by *antimony*, that metal is not to be found in the lungs, nerves, muscles, or bones, but chiefly in the liver. The antimony may be separated in the same manner as arsenic. —*Chem. Gaz.*

HOSPITAL FOR THE CURE OF DEFORMITIES.

COURSE OF LECTURES

ON THE

DEFORMITIES OF THE HUMAN FRAME.

BY

W. J. LITTLE, M.D.

Assistant-Physician to the London Hospital; Physician to the Orthopædic Institution.

Delivered at the Orthopædic Institution, Bloomsbury-square, in 1843.

LECTURE III.

Treatment of deformities from injury and disease of articulations. Contracted hip from disease, with and without luxation of femur. True ankylosis of hip. Co-existence of contracture of knee and ankle. Treatment of contracted hip. Section of tendons of the adductor muscles of thigh, rectus femoris, &c. Value of operation. Contracted knee from injury and disease. Complete and partial knee ankylosis, straight and angular. Treatment of straight knee ankylosis. Prevention of complete ankylosis.

THE cure of these deformities (ankyloses) is accomplished by mechanical and chirurgical means, employed singly or conjointly. A large proportion of cases, being those in which the rigidity depends on muscular contraction without structural shortening, and with little adhesion of the tissues on the flexed side of the joint, yield to the first class of remedies. The simplest case of stiff-joint is that which, for a few days or weeks, has been immovable after an accidental injury, or from inflammation of the articulation, without its termination in any disorganising process. Popular practice, based on experience, consists in the energetic employment of frictions and passive movements, by which the stiffness is gradually removed, volition returns, and the part is restored to activity. In a higher degree of rigidity the use of steam and vapour baths, oleaginous embrocations, fomentations, shampooing, and the application of mechanical instruments are required.

Where the immobility and contraction are considerable and of long duration, have resisted proper mechanical appliances, and principally or greatly depend on muscular shortening, then resort to the section of the tendons of the contracted muscles and ligaments, and of those bands of fascia and adventitious tissue which are within easy reach of the scalpel, followed by the application of appropriate mechanical apparatus, frictions, and manipulations. In the operation, the Stromeyerian method—namely, that of subcutaneous section—should be followed, and the limb be suffered to remain at rest in the deformed position until the small punctures have cicatrised. The limb should then be gradually extended, or flexed, as the case may require—the progress of this part of the treatment being slow or rapid, according to the size of the joint, and the dependence of the resistance to restoration, on the superficiality, or the deep situation, of the tissues around the articulation. The time requisite to effect a cure varies from one week to six months; occasionally a much longer period elapses before the articulation entirely resumes its functions.

The combined treatment may be divided into three stages; the section of tendons, the mechanical reduction of the deformity, and the period employed in restoring free movement by passive and active exercises, frictions, manipulations, baths, &c. The first and second stages usually engage but little time; the last, which is commonly the longest in duration, becomes often very tedious.

The treatment requires, even under the most favourable circumstances, great care and perseverance: and its accomplishment in some instances is so tedious and difficult as to discourage those who are not endowed with remarkable patience, which is so essential to success. I must, therefore, impress upon you the importance of steadily pursuing the means you have selected, so long as gradual amendment in the portion of the part is observable. You may, occasionally, after uninterrupted progress, suddenly meet with an obstacle to further straightening. A careful examination of the member becomes essential, you may discover some fibrous or tendinous band, the section of which may be necessary, or you may detect an insurmountable obstruction to complete restoration in the presence of some osseous or other firm adventitious deposit. The time during which an articulation may have been in part or wholly immovable, and yet be capable of restoration, appears sometimes incredible. The removal of deformity of that most important articulation, the knee, which had existed twenty-six years, has been effected. Restoration, after ten and fifteen years' loss of the use of an articulation, is not uncommon.

True ankylosis, or osseous union of the articular surfaces, having been regarded as a *fortunate termination* of articular disease, has rarely been the subject of curative attempts. The most notable and ingenious of these is the relief, by Dr. Barton, of Philadelphia, of true ankylosis of the hip, by sawing through the neck of the femur, and, after obtaining closure of the external wound, resorting to daily movement of the limb, so as to produce, at the ununited parts of the bone, an artificial joint. This operation, in Dr. Barton's case, succeeded perfectly; in the hands of other practitioners, it has been

alternately successful and fatal. It is preferable, in my opinion, to that proposed for true ankylosis of the knee, by my friend, Professor Dieffenbach, of Berlin, namely, breaking down the osseous union by chisel and mallet.

I entertain no doubt of the capability, in some instances, of restoring motion in an articulation between the surfaces of which the deposit of calcareous particles has already commenced. Nevertheless, the risk of reproducing disease will, for the most part, preclude the attempt to restore mobility.

On Deformity from Ankylosis of the Hip.

Inflammation of the hip-joint, acute and chronic, may be induced by mechanical injury—a blow, or a fall, on the part; or it may be a sequela of typhus, scarlatina, and variola, or other general disturbance of the health. Rheumatism is an occasional cause; but, more commonly, the inflammation partakes of that specific character which is denominated *strumous*. By which soever cause the inflammation is produced, deformity is not an unfrequent termination of it. The most common form is that of *false ankylosis of the hip, without luxation* (simple).—The stiffness or rigidity may be slight, depending only on some thickening of the capsular ligament, and on rigidity of the muscular tissues, from repose of the articulation. Lymph may have been effused into the interior, or on the exterior, of the articulation, constituting unnatural adhesions; suppuration may have proceeded externally, the route of the pus being indicated by firm bands, and cicatrices, more completely obstructing the motion of the member. This is the least severe form of rigidity, or ankylosis, of the hip, and may result from a slight attack of inflammation,—as strumous inflammation (ordinary hip-joint disease),—from rheumatic affection of the hip-joint, and from mechanical injury. Each of these causes may induce stiffness, immobility, deformity, and lameness, in consequence of the temporary disuse of the joint being attended by structural shortening of the muscles.

The *symptoms* are these:—The thigh is rigidly flexed and adducted, and, consequently, the patient can effect but slight or no involuntary movement of the joint; the trochanter major remains in its natural position; and there is considerable flattening of the nates, from wasting of the glutæi; with tension of the adductor longus, the adductor brevis, the adductor magnus, the pectineus, rectus femoris, and, occasionally, the sartorius and gracilis muscles. Little or no motion of the head of the femur in the acetabulum is perceptible on manipulation. With the duration of the ankylosis, the knee becomes more approximated to the abdomen and the opposite member. The patient applies the toes, only, to the ground, and walks with considerable lameness.

False ankylosis of the hip, with luxation, comes next in order of description. In many cases the ligaments by which the head and neck of the thigh-bone are attached to the acetabulum, become disorganised and loosened; the rim of the acetabulum and part of the head of the femur may have been destroyed by ulceration and caries, and the femur having been thus left to the unresisted action of the muscles of the hip, has become luxated, and is found resting either on the ilium, or the ischiatic foramen. In either of those situations the processes denominated the "formation of a new joint" sometimes ensues; but whether so great natural efforts at reparation take place or not, much rigidity, muscular shortening, and distortion remain.

The *symptoms* of this last described condition are, rigid flexion and adduction of the thigh, immobility, atrophy, and tension of muscles (greater than in the simple form of false ankylosis), and the trochanter is less prominent, and is situated at a greater distance from the anterior superior spine of the ilium than natural; the thigh is shortened, by elevation of the femur, on the dorsum ilii, or on the edge of the sacro-sciatic foramen, and by the caries or absorption of the head of the bone, producing considerable deformity; the leg and foot are rarely so large as the corresponding parts in the sound limb, their development having been impeded by long rest of the limb during the articular disease which produced the deformity. The diminution in length of the member, arising from these causes, may vary from half an inch to five inches, locomotion being effected with the assistance of a boot, the sole or heel of which is raised to a proportionate thickness; or the flexion of the thigh may be extreme, and, by preventing the application of the foot to the ground, may compel the patient to use a crutch.

As for *true ankylosis of the hip*—deformity from complete or osseous ankylosis of that part,—it so rarely ensues before the age of twenty-five or thirty years, and is, consequently, so seldom the subject of consultation, that without the existence, in pathological museums, of preparations demonstrating the osseous union of the femur and ilium, the practitioner might almost doubt its occurrence. True ankylosis may be simple, the head of the femur remaining in the acetabulum, which is uncommon; or the true ankylosis may be compound, the head of the bone being luxated, which is the common form. True simple ankylosis may be *angular* or *straight*; that is, the limb may be ankylosed either in the flexed or the extended position; whereas, in true ankylosis with luxation, the ankylosis is always *angular*, the limb being fixed in the semi-flexed position.

Symptoms of deformity from *true* ankylosis of the hip, *with luxation*, are, as regards the position and form of the limb, precisely

similar to those of false ankylosis with luxation, the difference consisting in the absolute immobility of the thigh. The diagnosis is often extremely difficult, as in false ankylosis,—owing to the great degree of muscular tension and the rigidity arising from deposition of lymph or cicatrices—mobility of the femur can, in some cases, be detected only after repeated examination, and often not until the pelvis has been firmly fixed by an able assistant. The alleviation of the inconvenience of ankylosis of the hip depends on the existence of mobility, however slight; the importance of a correct diagnosis cannot, therefore, be too highly estimated. In some cases considerable tact and experience in examination are requisite.

In every form of deformity from ankylosis of the hip, *contracture* of the corresponding knee and ankle may co-exist, and if the deformity be wholly or partially remediable, the contracture of these parts will require separate treatment.

The treatment of deformity of hip from ankylosis should be this:—If, in chronic or acute inflammation of the hip, the practitioner has been so successful that, after a few weeks or months duration of the disease, resolution has been effected, and slight muscular contraction, with thickening of the articular tissues, alone remains, attention to manipulation and friction and extension of the limb, with cautious exercise, may restore the functions of the member. If the muscular contraction and other resistance cannot be overcome by these means, an apparatus, consisting of a circular bandage fastened to the pelvis, and sometimes to the shoulders, with a steel spring attached behind to the femur, in order to effect extention of the member, may be worn, and will, in a short time, sufficiently remove the contraction to permit the application of the foot to the ground. Should the use of apparatus and friction prove insufficient, the division of the contracted muscles offers a remaining chance of restoration; but that should not be resorted to until the practitioner is satisfied that no risk of reproducing the disease of the hip exists. Thus, within the first, second, or third year of the cessation of the hip-joint disease, the attempt at restoration by means of mechanical apparatus will usually be preferable; and if in this manner the member cannot be completely straightened, the aggravation of its position will be prevented. Even in cases of false ankylosis, when osseous union appears to be imminent, judicious recourse to mechanical means will place the femur in such a position that the deformity will be much diminished, and the member will prove much more serviceable than when, from ignorance of the value of attention to that circumstance, the limb is permitted to remain in the completely flexed position in which ankylosis usually exists. The section of the contracted muscles already enumerated is of value in false ankylosis of the hip, even when many years have elapsed since the original disease began. I have by this means successfully treated adults who had suffered from morbus coxarius in their infancy.

The prognosis must, however, be guarded, as, in investigating the condition of the hip, owing to its anatomical conformation, greater difficulty in ascertaining the precise change which the structures have undergone exists than in similar deformity of many other articulations. Excepting in children, the flexion of the hip cannot be entirely overcome; but if, in older persons, restoration can be so far effected by the aid of tenotomy that, instead of walking with a crutch or crutches, and having the knee drawn up to the abdomen, the thigh can be straightened to the extent of permitting partial application of the foot to the ground, you will be amply rewarded for the attention bestowed on a case of a not very encouraging nature.

I recommend the operation to your attention less as a curative plan than as an important means of amelioration. Remember, however, that when you may have satisfactorily performed the section of tendons, the *least difficult* part of the treatment has been accomplished. In hip cases of deformity, indeed, as in every other, especial attention to the after-treatment is indispensable. Arrange beforehand the means that seem to be necessary for restoring the form and mobility of the part, and, after cicatrisation of the punctures, suffer no delay in the application of those means. Here is a cast of a late in-patient, aged sixteen years, in whom the limb was elevated to such an extent that the knee almost touched the abdomen, locomotion having been effected on crutches. The ineffectual application of mechanical apparatus in this case induced me to recommend tenotomy, from which sufficient amendment resulted to permit the application of the foot to the ground with the intervention of a sole two inches thick.

I shall conclude this part of the lecture with two cautions; first, beware of using violence in the after-treatment; secondly, avoid tenotomy, or even active manipulations, until the original disease and any tendency to relapse, have completely subsided.

I now proceed to the subject of

Contracted Knee, from Inflammation or Disease of the Articulation.

The great size of the articulation of the knee, the large amount of lowly-organised fibrous tissue entering into its composition, the absence of warm muscular coverings, such as are present in the shoulder and hip-joints, and its consequent exposure to changes of temperature, its distance from the central organ of the circulation, and the

dependent position of the lower extremity, together with its liability to accidental injury, explain its susceptibility to disease. The knee is, in fact, more obnoxious to the destructive influences of scrofulous, rheumatic, and other inflammations, than any other articulation of the frame, and consequently the contraction and deformity, denominated ankylosis, is of frequent occurrence in this situation.

Knee ankylosis may be of two kinds, complete or osseous, and partial or membranous. The former being insusceptible of relief, except when the calcareous spiculæ are very few, need not detain us long. Greater importance attaches to the consideration of the means of distinguishing true from false ankylosis, but I shall defer my observations on this subject until I have explained the principal characters of false ankylosis of knee.

Little or no deformity accompanies partial straight ankylosis of the knee, except that arising from imperfect development or wasting of the muscles of the thigh. These offer occasionally a strong contrast with the powerful mass of the gastrocnemii, the energy and growth of which has been excited by the increased demands on their activity consequent on the stiffness of the knee. The leg commonly presents slight rotation outwardly, the toes being everted. In the act of walking, therefore, the foot more easily avoids inequalities on the surface of the ground.

Straight partial ankylosis of knee is sometimes the result of imperfect cure of angular ankylosis, extension having been accomplished, but the joint remaining incapable of flexion. You may, therefore, be consulted in a case of rigid immovable knee in the straight position, and be required to consider the propriety and possibility of restoring the natural movement. You will reflect on the probable nature of the obstruction, you will endeavour to ascertain whether it arise from adhesions resulting from effusion of lymph among the extra-articular tissues, whether from bands of adventitious matter, the product of cicatrised abscesses, or from membranous and calcareous adhesions of the opposing articular surfaces. You will refer to your knowledge of morbid anatomy of this part derivable from examination of specimens of ankylosis, contained in anatomical museums, and remember the possibility of bony matter being deposited in the posterior part of the joint, in the situation of the crucial ligament, or perhaps the patella being ossified to the femur, so as to restrain the movement. When satisfied of the existence of mobility, however slight, especially when the resistance is of an *elastic* nature, you will employ the general therapeutic measures described whilst treating of deformities from ankylosis in general,—frictions, manipulations, bathing,—and for mechanical means select one of the forms of apparatus I shall recommend for reduction of angular ankylosis, the action of the instrument being of course reversed, when you desire to bend the articulation. I have not found the aid of tenotomy requisite in the remediable cases of a straight stiff knee that have fallen under my observation. Although this deformity does not prevent application of the foot to the ground, it occasions great inconvenience in walking on an uneven surface, or ascending a hill or staircase. The great flexibility of the ankle, to a certain extent, relieves the discomfort, but the limb being, from the inflexibility of its most important joint, rendered relatively too long, it is felt continually *in the way*,—patients eagerly embrace the hope of obtaining a slight amount of flexion, and this may, in the majority of instances, be obtained by perseverance in the methods above mentioned. I may add a few remarks here on the prevention of ankylosis and deformity. Many cases will present themselves to you, as medical practitioners, in which, after inflammation, either of a phlegmonous or a rheumatic character, and incipient calcareous deposit, attention may be usefully directed to attaining a more favourable position of the member, and to the retention of a limited amount of mobility. Bear in mind that a slightly flexed knee is preferable to an absolutely straight one, and that even mobility to the extent of a few degrees will greatly ameliorate the patient's condition. It does not, at first view, appear probable that any proper interference can arrest the deposit of calcareous spiculæ into the abnormal tissues of an articulation, and the production of a complete ankylosis. On the contrary, it is generally supposed that, whenever the organic crystallisation of the material that circulates through the newly-organised adventitious tissues has commenced, no means which we possess can cause its cessation. But I am able, notwithstanding, with some confidence, to affirm that this process of ossification, or calcareous deposit, may safely, permanently, and advantageously be interrupted, by frequently-repeated gentle movements of the articulation. Surgeons entertain well-founded objections to the movement of a recently inflamed articulation as a means of preventing ankylosis, the danger of reproducing disease being, in incautious hands, great; but too limited a view of the nature of the previous disease, and exaggerated fears of the danger of relapse, often indispose the practitioner to attempt restorative measures. Remember, however, that most local inflammatory affections require for their production and maintenance a morbid condition of the general frame, and that, during the continuance of the local disease, a beneficial change in the general health often ensues; so that those means which, at one stage of the affection, would have been ruinous to

the articulation, may at another be safely applied. The general health should constitute an important guide as to endeavouring to restore flexibility to a partially-ankylosed limb. After severe phlegmonous or rheumatic inflammation of a joint, which has not terminated by resolution, but by one or other of the "terminations of inflammation," the system having been depleted, or the morbid predisposition removed, by proper regimen, or by antiphlogistic and other remedial agents, we may usually, within a few months, endeavour to remove the resulting ankylosis; but after strumous disease of an articulation it is prudent to wait a longer period, or until a favourable change in the diathesis of the individual has taken place. Sometimes, in such cases, we may be compelled to wait even several years before attempting to restore the usefulness of the member.

CASE OF

TALIACOTIAN OPERATION,

WITH REMARKS.

By Robert Storks, Esq., Surgeon.

(Read before the Medical Society of London, Oct. 9, 1843.)

October 10, 1842. I was requested to-day by my friend, Mr. Robinson, of Gower-street, to see George Culver, ætat. 38. He stated that in 1835, whilst lifting a wheelbarrow, he received a severe blow across the nose, which at the time stunned him. The immediate effects of the accident quickly passed away; but on different occasions he felt slight pain about the nose and forehead, not sufficient, however, to alarm him. In 1836 the pain, swelling, and fetor, which had gradually appeared, induced him to seek medical advice, but without relief. In 1837 several of his teeth fell out, and the apex of the nose became ulcerated. At this period he describes the pain and stench as insupportable. In 1840 he met with an individual who was in the habit of using an arsenical preparation for the cure of cancer, from whose representations he was induced to consent to the application of the plaster, which produced a large slough, including a portion of the whole thickness of the right side of the upper lip; the sores left after the separation of the slough healed, leaving a considerable contraction and eversion of the upper lip, exposing the mucous membrane.

The stench and occasional attacks of pain continued, and in 1841 an abscess formed near the inner canthus of the left eye, through which a small piece of necrosed bone was discharged. In this year he became the patient of a dispensary, but derived no benefit from his attendance. He has continued in this state up to the present time, unable to obtain employment in consequence of the fetor from his nose, and his disfigured appearance.

When I first saw him the whole cartilaginous portion of the nose was sunken, and partially destroyed; the nasal bones were entire; and near the inner canthus of the left eye was a cicatrix produced by the discharge of a portion of bone. The upper lip, to the right of the mesial line, was drawn up, and the mucous membrane exposed, by the contraction following the use of the arsenical preparation previously alluded to.

On lifting a flap which overhung the nostrils, formed by the remaining piece of cartilage, a small portion of the columna, about the thickness of stout twine, remained, which was the only vestige of the septum dividing the nasal fossæ; the stench from the nostrils was unbearable, and various portions of bone in a necrosed condition (not however, loose) could be felt with the probe.

On looking into the mouth, all the teeth in the upper jaw, from the first bicuspid on the left to the second molar on the right side, were found absent, and a small fistulous opening behind the sockets of the central incisors, and corresponding to the union of the horizontal plates of the superior maxillæ, was visible, through which a constant discharge of pus oozed; the cicatrix of an ulcer on the velum is to be seen.

His general health is good; he denies any syphilitic taint; is regular in his habits, and is willing to undergo any suffering to be relieved from his loathsome malady and the consequent deformity.

He was directed to use a nitric acid lotion with a syringe, and on various occasions pieces of bone, in a state of necrosis, were extracted, which appeared to be portions of the vomer and inferior turbinated bones. In consequence of the large size of some of these pieces it was found necessary to divide what remained of the columna to make an aperture sufficiently large to allow of their removal.

January 25, 1843. The fetor and discharge having quite ceased, and the parts within having appeared quite healthy during the last three weeks, I resolved, with the concurrence and kind assistance of Mr. Fergusson, to perform the Taliacotian operation. The patient being seated in a chair, and a piece of soft thick leather being cut into the size and shape required to supply the deficiency (due allowance being made for the subsequent contraction), it was laid upon the forehead, and its outline traced with ink. A scalpel was then carried down to the pericranium in the course of these lines, and the flap thus circumscribed dissected off the forehead, care being taken not to interfere with the pericranium, and to carry the incisions *deep* at the root of the nose, so as to ensure a sufficient vascular supply in the flap. The hæmorrhage (which was free)

being checked by the application of cold, and exposure of the cut surfaces to the air, the remaining steps of the operation were proceeded with. An incision in the course of the line of suture between the two nasal bones was made from just below the neck of the flap to their extremities, which was then made to diverge on each side, in the course of the margins of the nasal fossæ, resembling in form an inverted Y. A portion of the integuments, two or three lines in breadth, was next removed from each of these lateral incisions. I then attempted to loosen the upper lip from its adhesions to the superior maxilla (without interfering with the mucous membrane of the mouth), to enable it, if possible, to resume its natural position. Very little good was, however, effected by this proceeding.

The bleeding having ceased, the flap was twisted from right to left, and neatly approximated by five points of suture to the wounds on the face. The new nose being raised by some lint, a point of suture was introduced into the lower part of the wound on the forehead, water-dressing applied, and the patient sent to bed already much improved in appearance. No vessel required the application of a ligature.

25. Nine, p.m. The flap was warm and in good apposition; some oozing of blood from the forehead; general fever.

26. Had not slept for fear of disturbing the parts; general fever less; flap adherent and warm; wound on the forehead had contracted considerably. Two straps were applied to the wound on the forehead, warm water-dressing to the nose.

28. Removed the sutures; the flap was found to be firmly adherent.

29. There had been some hæmorrhage from the lower part of the wound on the forehead.

30. Removed the lint from the interior of the nose; granulations springing up; except where a small thin slough has formed, it retains its shape without support. Re-introduced the lint.

Feb. 5. Slough separating; wound on the forehead covered with luxuriant granulations.

11. The slough had separated; new nose becoming firm; supported the apex by straps brought up to the forehead.

22. The wound on the forehead nearly healed; the temperature of the right cheek, 85°; the nose, 83°.

March 20. The wound on the forehead and the interior of the new nose having been quite cicatrised for some days, I divided the neck of the flap by passing a probe-pointed bistoury beneath it and cutting upwards; a triangular portion of the integument beneath being then removed, the slip was laid down and retained by three points of suture. One small vessel, evidently much enlarged in calibre, was divided, and furnished blood freely.

21. The stitches were removed, adhesion had taken place.

30. The wounds were completely healed.

June 7. As the new nose had now acquired a free circulation for a considerable time, I directed my attention to the introduction of a septum; the removal of some of the old feature, which plugged up the nares; the bringing forward the point of the new nose, which had become much contracted during cicatrisation; and the removal of the unseemly scar from the lip. To effect these varied objects I commenced the operation by making an incision just beneath the nose and parallel with the commissure of the lip. This enabled me to introduce the point of the scalpel and dissect off the cheek, on each side, from the superior maxilla, and thus render the apex more moveable. A straight probe-pointed bistoury was then passed into the nares, after a puncture had been made, and such portions of the old feature as interfered with the passage scooped out. Three radiated incisions, from within outwards, were made, a quarter of an inch in length, in the apex of the nose, care being taken not to divide the skin; this allowed of its further expansion.

The upper lip being then put upon the stretch, a bistoury was thrust through it, and a portion, three-fourths of an inch in breadth, separated, including nearly the whole of the cicatrix produced by the charlatan previously referred to. The divided lip was brought into apposition by two needles with the twisted suture, and the separated portion (after its free edge had been made raw) was approximated to the radiated incisions made in the apex of the new nose by a needle and the twisted suture. The lip was much improved by this operation.

The portion of lip raised readily united, and the whole organ was thus restored. It was found necessary to keep pieces of elastic bougie in the nostrils during cicatrisation, to prevent their contraction, and to pare down the new columna from its superabundant size.

The accompanying drawings are faithful illustrations of my patient's former and present condition. He is not, however, a little indebted for his improved appearance to Mr. Robinson, who kindly supplied the deficiency in his mouth by some artificial teeth.

Although the Taliacotian, or, more properly, the Indian, operation for the restoration of the nose has been frequently performed since its introduction by Mr. Carpue in 1816, there still seems an apathy about English surgeons to the cultivation of that department of operative surgery which can boast of its object *not being the mutilation* of the body, but the restoration of lost parts. Although all rhinoplastic operations must be

more or less modified by the condition of the patient or the fancy of the surgeon, still, there are some rules which admit of general application to this class of operations, and are, therefore, well worthy of attention.

The first and great principle to which the surgeon has to attend in the cases that are really successful, is the necessity of making the portion of skin intended to supply the deficiency of such a size that it may be considerably larger than the gap to which it is intended to be applied. This was particularly inculcated by him who we may look upon as the originator of the art, Taliacotius, and modern experience has fully borne out the necessity of the advice. It is, indeed, surprising and inconceivable to one who has not witnessed it, how a portion of skin, when thus raised, becomes increased in density and diminished as to length and width; and it is my conviction that the operator, unless he, indeed, runs into extremes, will never err by making it *too* large; for what at first may appear an unseemly nose ultimately becomes, if not of the Roman or the Grecian cast, at all events one not disproportioned to the other features.

Surgeons have varied the method of performing the different steps of this operation, some insisting that the incisions intended for the reception of the flap should be made first; others, that the portion of skin intended to supply the deficiency should be raised, and the incisions necessary for its adaptation should form the latter part of the operation. Although these matters are, perhaps, of little importance in themselves to the young surgeon (each plan having its advantages and disadvantages), they are very perplexing. I was induced to adopt the latter plan in the case just alluded to for the following reasons: first, that the most painful part of the operation was thus proceeded with at once; secondly (and the most important), that, knowing thus definitely the size and form of the flap, I was enabled the more accurately, to adapt my incisions on the face to the raw surfaces it presented for adhesion. To my mind this latter argument is sufficiently strong to induce me, in any future operation, to adopt this course of proceeding.

It is recommended by several authors that the remains of the old nose should be pared down, and those likely to interfere with the future symmetry and usefulness of the feature removed. This, with the greatest deference for the distinguished authorities alluded to, I cannot but think a practice open to objection. Should the operation fail, and the flap slough, the patient is left in a much worse condition than before the operation; should it succeed the ruins of the old feature act as a considerable support to the nose, until it has become sufficiently consolidated to support itself; and, should it become necessary, they are easily removed at a subsequent period of the treatment. I would beg to direct attention to the form of incision (an inverted Y) used in this case, which, while it allowed a large surface for the adhesion of the flap had the operation failed, would have left the patient in as good a condition (with the exception of the cicatrix on the forehead) as before the proceeding.

With regard to the adaptation of the flap to the incisions on the face, all seem to agree that sutures are the best means of ensuring their accurate apposition. Respecting the form of suture surgeons have differed; none

will, however, be found so easy of application in this situation, or likely to answer the purpose so well, as the common interrupted suture.

I cannot but agree with Dr. Zeis, of Dresden, who, in his "Manual of Plastic Surgery," published at Dresden, in 1838, is desirous of impressing upon the surgeon's mind the necessity of introducing a suture wherever the parts are not in accurate contact, and dissuading him from any limit as to the number he should apply. For the formation of the septum from the lip we are indebted to Dr. Dieffenbach and Mr. Liston, a method possessing many recommendations over that practised by the earlier operators, of forming the septum from the forehead. In the present instance many advantages were gained by adopting the proceeding of the last-named authority, among which the removal of the large cicatrix from the lip, formed by the arsenical preparation previously alluded to, was perhaps the most prominent.

As the healing process progressed the point of the new nose became much depressed, a circumstance of not unfrequent occurrence, I believe, during cicatrisation. No method of dressing that I adopted prevented this, and by the time that the introduction of the flap was agreed upon, partly from the remains of the old nose, and partly from this contraction, the aperture of the nares was completely blocked up; some of the remains of the old nose, however, were readily removed, and the point was brought forward, by adopting a proceeding employed by Mr. Fergusson, in a case given in his "System of Practical Surgery," p. 453, which is a kind of subcutaneous dissection of the cheeks from the superior maxilla, that enabled me to bring forward the apex, and keep it in that position by the introduction of the septum.

At no period of his cure did this man refer the sensations produced by touching the new nose to his forehead; at one time, on the *left* ala being irritated with a pen, the painful feelings thus produced were referred to the *right side* of the feature. This has, however, gradually disappeared. The senses of smell and taste, which he had entirely lost during his illness, have been regained since his cure. Although there is no pretence to any novelty in the proceeding adopted in this case, there are still many points of interest connected with these operations, and the relief which they afford to the patient is a matter of much gratification to the surgeon and an honour to the art. Many individuals left to endure all the misery of wounded feelings, and (as in the present instance) the loss of the means of support, have been thus made comparatively happy, and I cannot but express my surprise at finding an eminent modern authority describe the result of such an operation as "more curious than useful," and declaring that "the substitute is more disagreeable than the deficiency."

ON

ANNUAL VITAL PERIODS,

BEING A FIFTH CONTRIBUTION TO VITAL PROLEPTICS.

By T. Laycock, M.D., Physician to the York Dispensary.

In my last communication (page 826, vol. ii., 1842-43)* I referred to the pathological influence of the seasons, and compared certain meteorological changes with pathological data. I wish now to state distinctly that I do not consider this the only or the best mode of attaining to a knowledge of the influence of the seasons on vital action. Our researches should be founded on physiology rather than on pathology; we must ascertain the annual cycle of normal action before we can correctly lay down that of pathological phenomena.

We know that quotidian vital periods are regulated by what may be termed *the habit of recurrence*, as well as by meteorological influences. A tendency to the performance of a physiological act, done at a given hour in one day, occurs at the same hour on the next. This is a fact I should suppose known to and observed by every one. Now, there is really the same tendency to the recurrence of annual periods, although it has not been so extensively noticed. The migrations of animals present some curious illustrations of this fact. The exact punctuality with which the storks return to their summer quarters at Smyrna is noticed by Mr. Hamilton (Researches in Asia Minor, vol. i., p. 70) as a curious fact; they generally appear on the 9th of March. "On my way to the fort of Aziz Khan, the Hazara manager of the district for Dost Mahomed," writes Mr. Moorcroft, "I passed a small pond filled by a stream from a holy spring, which was so full of trout as to baffle description or credibility. They were held sacred, and were exceedingly tame. On the 21st of March to a day, according to the report of the people, the fish desert the pond for the rivulet that waters the valley." (Moorcroft's Travels, edited by Professor Wilson, vol. ii., p. 382.)

The dates of the reappearance and departure of migratory birds which visit us, correspond very closely year after year. Swifts, for example, are nearly all gone by the 10th of August. The recurrence of disease at exactly annual periods has been noticed by various writers, and instances have been

* For the four preceding papers of Dr. Laycock, see Lancet, vol. ii., 1842-43, pages 124, 160, 423, 929.

communicated to myself, the correctness of which I had no reason to doubt.

What is the cause of these periodic movements? Is it exoteric or esoteric? That is to say, do they occur only in virtue of periodic meteorological changes, or in consequence of a cycle of changes within the animal? Facts, I think, will show that the cause is *exclusively* neither the one or the other, but both, and compounded of both, that is to say, that it is esoteric and exoteric. The migration of animals is invariably connected with the commencement or cessation of the reproductive process, and in birds at least, according to Dr. Jenner (Phil. Trans., 1824, p. 11) as invariably connected with the size of the ovaria and testes; when these begin to shrink the birds are off, as the cuckoo, whose ovaria are atrophied in July. Certain changes take place in animals concurrently with the migratory movements and with the development and atrophy of the organs last mentioned, which have an important bearing on pathology. The most striking of these in birds are the growth of the sexual plumage, the fall of this, or moulting, and its regeneration; but there are other organs which are affected concurrently and in close connection with the ovaria and testes. As I have demonstrated these at length in my published work (A Treatise on the Nervous Diseases of Women, chap. 2), I need not go over the ground again. The organs or structures under the influence of the ovaria and testes, are the thoracic region in the male, and the pelvic in the female, and the whole of the cutaneous products in both sexes, though for the most part negatively in the female. Thus, the colour of certain cutaneous appendages in butterflies, beetles, and fishes, is deeper in the male than the female, or is seen solely in the former. This fact is very conspicuous in the *polygomatus*, a lepidopterous genus. It is also illustrated by the common stickleback, the grayling, and the bull-trout.

In all birds the sexual tints are observable: in the pye tribe not particularly striking, but in humming-birds (the butterflies of *aves*), and in birds of paradise, the cock bird displays a most extraordinary brilliancy of colour, far beyond that of the hen. The odoriferous glands of the skin are influenced by the ovaria or testes in probably *all* classes of animals; certainly in insects, reptiles, birds, and mammals. In the latter class these glands are situate, for the most part, on the lateral thoracic or inguinal region, or upon or close to the pudenda. The form and grouping of certain cutaneous appendages are materially influenced by the testes. In birds it is the feathers, &c. of the two ends of the trunk, as the crest, wattles, neck and tail-feathers; in mammals the horns, mane, tusks (canine teeth), and general distribution of the hair. The tufts on the ears of lynxes and squirrels appear only at the breeding season. In man the hair on the shoulders, as well as on the chest and throat, is influenced by the testes, and also (in the absence of hair) the sebaceous glands. On the contrary, in females, the cutaneous appendages of the face are not developed, but the subtegumentary fat is, and the mammary glands attain a magnitude never seen in males unless the function or structure of the testes be deranged.

The difference in size between the thoracic and pelvic or abdominal regions is marked, with only two exceptions, in all the divisions of the animal kingdom, insects, fishes, birds, mammals. The neck, jaws, and appendages to the jaws, are also more strongly developed in males than females. The organs of voice are also influenced in a most remarkable manner by the testes. The females of insects are invariably silent, and, during incubation at least, the cock-bird is alone vocal. The voice of male mammals, as the ram, stallion, bull, the lion, and man himself, is well known to be altogether different from that of the female, and to be in close dependance on the testes. In females the salivary glands, thyroid body, pharynx, fauces, and œsophagus, are all influenced indirectly, and in general, pathologically, by the ovaria.

I have alluded to these changes for two reasons: firstly, to show that as they demonstrate a *nisus* or its cessation in the ovaria and testes, one may fairly consider the changes themselves as indicating the period when the concurrent atrophy or the excitement of the reproductive organs takes place; secondly, that we may be better able to trace the diseases directly or indirectly dependent thereon. To this last I shall refer again.

M. Quetelet has published in the ninth volume of the "Transactions of the Royal Academy of Brussels," some directions for the observation of periodic phenomena. These are arranged under the heads of—1. Meteorology and "physique" of the earth. 2. The vegetable kingdom, noting the annual and diurnal periods, and giving a list of plants to be observed. 3. The animal kingdom. Now, the instructions under the last head appear to be incomplete. As, in giving these, M. Quetelet has been guided more by the views of Mr. de Selys, Longchamps, and M. Cantraine, than by his own judgment, he will, perhaps, the more readily permit me to offer some suggestions, which, if adopted, may render his and their plan more perfect, for I ought to state that philosophers in different parts of Europe have promised to adopt this proposed system of simultaneous observations.

1. I would suggest that the *moults* of all animals should be more extensively observed, and not those of birds exclusively. Thus, the arachnidæ, according to Audouin, cast their skin in spring, after the exclusion of the ova; the crustacea shed their shell as

regularly as the stag his horns. Snakes change the whole of the epidermis every autumn, even the outer layer of the cornea is cast off. It does not appear that fishes moult, but they undergo other changes in the skin analogous to those observed in birds and mammals. Young sea-breams (chads) acquire the lateral spot only during the first autumn after they are spawned, when they are about half grown. The young of the whole of the genus salmo are striped, but the stripes disappear just as the spots and stripes in the young of the cervine and feline tribes of mammals, for the young of the lion and puma are as much marked, for a time, as those of the tiger and leopard.

2. The seasonal change in the *colour, form, and other changes of the cutaneous appendages*, might also be noted more extensively. The pectoral fins of the grayling are reddish about spawning time, and the male bull-trout is of a different colour at the same season. The white spots of the fallow-deer (cervus dama) disappear at the casting of the coat in autumn, and reappear in spring, but new hairs are not produced.

3. The *mortality* of animals might be observed. The period of moulting is always one of sickness, for the whole system is affected. Numbers of the common shrew are found dead in autumn, a mortality probably in some way connected with the seasonal change.

M. Quetelet notes the period when the green grasshopper first chirps as worthy of observation, but the *changes in the voices* of animals should be noted, or, at least, the song of birds. The cuckoo's note, for example, changes in June, when the ovaria begin to shrink.* In noting all these normal changes, adult animals should be carefully distinguished from the young, but especially in observing the moults of birds, as all birds moult in from one to three months after being incubated. The moulting of the sexual plumage should also be distinguished from the general moult. In noting the migratory movements the male animal should be distinguished from the female, as the two sexes differ considerably in their habits. There are some curious coincidences in periodic phenomena worth noting, as the departure of swifts, &c., coinciding with the storms and meteors of August 10th—12th.

If we examine closely the annual changes in animals, we shall find that there are two distinct series, the one exoteric, the other esoteric, but running into each other. The habits of insects are not guided by temperature solely. They, like our summer emigrants, seek winter quarters in autumn, long before the cold sets in, and even when the season is not so cold as it had been during the summer. Their revival in spring is also dependant upon something more than the mere sensation of warmth. Kirby and Spence (whose statements I quote) attribute these movements to instinct (Entomology, second edition, vol. ii., pp. 38 and 56); but it is plain they are analogous to the migratory movements of fishes, birds, and mammals. In many birds the vernal generative *nisus* is clearly esoteric, that is to say, like the re-appearance of insects, it is independent of meteorological changes; for the pairing of many birds takes place in February, a month much colder than October or November, when the generative functions cease. After this vernal period of activity the summer period of repose comes on, the ovaria shrink, and the sexual feathers fall off. Then another period of activity recurs, the sexual plumage re-appears, the reproductive functions are again performed; next the autumnal moult follows, and now *all* the feathers, together with the sexual, are cast off. Then comes the winter garb, and a change in the colour only of the feathers, and not in the feathers themselves. This is a period of repose, and is terminated by the vernal period of activity, when the sexual plumage and colours are superadded to the autumnal growth of feathers. Now, some of our birds of passage do not rear their second brood. Swifts, like nightingales, migrate to Southern Europe in August, for this purpose, but a solitary pair occasionally remains behind the rest, detained by some accidental circumstance, and then they will have a brood in September and migrate in October. Cuckoos are summer emigrants, but if kept in a cage they moult in autumn.

Does man undergo any changes of the kind described? that is to say, are the reproductive organs in him less active in winter and the beginning of summer—more active in spring and at the end of summer? and is there anything like a moult in autumn? Statistics show us that the greater number of births occur in December, February, and March, and the fewest in June, July, and August; consequently, the greatest number of conceptions would take place in August or September, May, and June, and the fewest in October, November, and December. In the following table, drawn up from Quetelet's data, the first column exhibits the number of births in the rural districts of the Low Countries, from 1815 to 1826, inclusive, and the second, the ratio. *

* This change has long been popularly observed. Shakspeare and Ben Johnson both allude to it; it has even become the burden of a popular rhyme :—

> In flowing May,
> He sings all day;
> In leafy June,
> He changes his tune:
> In ripe August,
> Go he must.—(Common Proverb.)

* The statistical return of births in the Report of the Registar-General are for the four *quarters* of the year only, the *popular* division, and, of course, are not available here.

Months, 1815 to 1926.	Births.	Ratio.
January	159,787	1.102
February	170,699	1.177
March	164,851	1.137
April.....	147,118	1.014
May	134,446	0.927
June	125,026	0.862
July	121,512	0.838
August	131,657	0.908
September.....	144,389	0.995
October.....	146,362	1.009
November.....	146,285	1.009
December	148,186	1.022

We might also expect abortions and uterine profluvia to be more frequent in spring, and this *à priori* inference the general statements of various writers seem to bear out. It is a popular notion that the sexual feelings are strongest in spring and least ardent in autumn—an old idea, since Rufus, a Greek writer, quoted by both Oribasius and Œtius, has left it on record.

The characteristics of the cutaneous appendages in man are not sufficiently striking to decide, without close observation, whether there be an autumnal moult or not. "Spring and fall" have long been popularly known as the seasons in which cutaneous eruptions are most apt to appear; and the habits of some of the exanthemata render it probable that there is a determination to the skin at these seasons. In those diseases in which the horny structures of the skin are unusually developed, as ichthyosis and pellagra, a seasonal change is experienced. The "porcupine man," as he was called (whose history is recorded in the early volumes of the "Philosophical Transactions"), and his descendants, appear to have all cast their scales in autumn. In pellagra, according to Dr. Holland's observations, the cutaneous affection remits in autumn and recurs with increased severity in spring.

It is difficult to class the diseases which may arise secondarily from the exaltation or diminution of function in the ovaria and testes. The brain may sympathise with them, and cerebral affections result; or the functions of the kidneys may be disturbed, since the anatomical and physiological relations of the two sets of organs are very intimate. Thus, the fatality of epidemic exanthemata, as rubeola and scarlatina, may be influenced by the physiological condition of the kidneys. Thus, also, a variety of neuroses, particularly the urinary neuroses, gout in all its forms, rheumatism, hysteria, hypochondriasis, &c., may be developed. I must, however, refer to my published work in proof that these diseases, independently of theory, are more apt to recur at spring and autumn than at any other times.

The diseases which arise at particular periods, from exoteric causes, may be arranged in two classes. The hygrometric and thermometric changes of the year must necessarily induce changes in the density of the atmosphere, and this change in density will be equal to an increase or diminution in the excretion and imbibing power of the lungs. As, at each inspiration, less oxygen will be taken into the lungs in summer than in winter, less carbon will be excreted, and hence the necessity for a vicarious or complementary action of the liver during the hot months. In this way we can readily explain why bilious diseases are more prevalent in the hot months and in hot climates. The perspiratory organs of the skin are also more active in summer, and the urinary secretion proportionately diminished. Various diseases are directly consequent on these and similar changes in the seasons, and constitute one of the two classes referred to. The other class will comprise those for the most part dependent upon causes properly terrestrial, as marsh and jungle fevers, although these are doubtless connected with the physiological changes just alluded to.*

Of course the action of remedies would vary under all these circumstances—a general principle of the highest importance, although I pass it thus cursorily. I cannot close this part of my paper better than by the summary of seasonal diseases left by Hippocrates:—

"Diseases of every kind may arise in any season of the year; others, however, increase and are excited only in particular seasons.

"In spring, insanity, melancholy, epilepsy, hæmorrhages, anginæ, catarrhs, hoarseness, coughs, lepra, *impetigines*, *vitiligines*, pustules, numerous ulcers, tubercles, and pains in the joints.

"In summer, some of these, together with continued and ardent fevers, many tertians and quartans, vomiting, diarrhœa, lippitudo, otalgia, ulcers in the mouth, *genitalium*, *putredines*, and sweats.

"In autumn, the fevers of summer, both quartans and erratic diseases of the spleen, anasarca, tabes, stillicidia urinæ, diarrhœa and tenesmus, sciatica, anginæ, shortness of breath, *volvuli*, epileptic fits, insanity, melancholy.

"In winter, pleurisies, inflammation of the lungs, lethargies, catarrhs, hoarseness,

* In his late communication to the Statistical Society, on the Influence of the Seasons, Dr. Guy distinguishes very distinctly between these two classes of diseases. It is manifestly of importance that the distinction should be borne in mind. Dr. Guy will see, however, that I am inclined to differ with him as to the greater prevalence of the sexual instinct during the hottest months. Not having yet seen his original paper, I am unacquainted with the diseases which, in his opinion, form a measure of the activity of the sexual passion, and, of course, am unable to point out the grounds of difference.

coughs, pain in the chest, sides, and loins, headaches, vertigo, apoplexy." (Aph., lib. iii., §. xix—xxiii.)

This was written above two thousand years ago, and probably a better summary of the seasonal diseases of Greece could not now be given.

I may here remark, as an answer to some private correspondents, that the papers I have communicated from time to time to THE LANCET are rather presented to the public as "*memoires pour servire*" than as finished productions. They are mainly intended to form the outline of vital proleptics, to incite the collection of materials for the complete structure scattered through various branches of science, and particularly to point out what observations are wanting to connect and cement these materials. With special reference to the last object I would observe that M. Schwann, a corresponding member of the Royal Academy of Brussels, has published in the Transactions of that academy (tom. ix.) a set of instructions for the observation of the periodic phenomena of man, as a sequel to the instructions of M. Quetelet, before referred to. It appears to me that those instructions are imperfect, and that M. Schwann has neither been fully acquainted with what it is necessary to observe, nor with what *can* be observed. He justly remarks, that rutting, or "the heat," migration, moulting, and hybernation, are the principal periodic phenomena to be observed in animals, but declares positively that if we seek for analogous phenomena in mankind we cannot find them. Now, this is both an error and an abandonment of the greatest and most important class of phenomena to be observed,—the class connected with *esoteric* periodic changes,—of the daily, weekly, monthly, or seasonal recurrence of which, as shown in my current paper and the preceding, M. Schwann appears to have no idea whatever. Unless, however, these are correctly observed in *all* their relations, the mere observation of meteorological or *exoteric* pathological changes will lead to little better than inexplicable anomalies. It will be like prosecuting the study of physiology by pathological facts exclusively. But, indeed, we already know, in a great degree, what M. Schwann has laid down under his first head as proper to be observed, and Mr. Farr alone could complete our knowledge. In the second head of his paper M. Schwann gives instructions for observing the phenomena which occur at certain periods of life, including, of course, the septennial periods. The object to be obtained and its importance are well stated,—not so the means of its attainment. The first and principal, according to M. Schwann, is to weigh and measure the different viscera as well as the general dimensions of the body. The anatomist, however, will easily appreciate the difficulty of fulfilling *exactly* the necessary conditions (for exactness is absolutely necessary) when he is informed that, firstly, the subject must be a healthy individual, and necessarily a person who has been accidentally killed; then, again, he must not be a fat subject, as fat would add to the weight and size of organs; next, every viscus in every subject must be properly prepared for weighing and measuring,—the cerebrum and cerebellum, the medulla oblongata and medulla spinalis, the abdominal and thoracic viscera, the thyroid body, the supra-renal capsules, the salivary glands, and the weight of the muscle, less the weight of the bones "*apres la maceration.*" All this is very good, but the plain truth is, such observations on an extended scale (and they must be on an extended scale to be useful) are, in one word, impossible, and it is scarcely necessary to add that if possible they would be of little real (or what is the same thing) practical value, without an equally extensive knowledge of periodicity in the functions of organs. The object aimed at would, indeed, be better attained by observing the latter, because the degree of development of organs may in general be expressed by their functional activity. One advantage that practical medicine would derive would also be much greater; for the diseases that can be cured or alleviated are either functional or must be treated with reference to function, and that even when structural.

Now, I should regret if, in making these suggestions to M. Quetelet and his coadjutors, I should be thought to detract from the merits of those gentlemen. Nothing I could say would add to the well-deserved reputation of M. Quetelet, and if there be those imperfections in the instructions which I have pointed out, it is manifest that they may arise rather from the immense extent of the subject than from individual incapacity or negligence. The materials are so scattered, and first principles so imperfect, that no *one* mind, however happily constituted, could grasp the whole. The attempt now made by the Belgian academicians to secure the systematic and philosophic observation of periodic phenomena is, without doubt, an excellent beginning.

York, October 14, 1843.

BOILS.—You cannot disperse them, even if you ought, you may try, therefore, to bring the boil forward by steaming; but you had better cover it with plaster, and attend to its source, and prevent others, by attention to the stomach, by an emetic and alterative pill, and bitter infusion with alkaline solutions. When it looks ill, and exhibits a mass of corrupted cellular membrane, it should be dressed with digestive ointment and poulticed. To correct the disposition to them, after considering the state of the intestinal canal, give antimonials, and order the warm bath.—*Sir Charles Bell.*

THE LANCET.

London, Saturday, October 21, 1843.

In the last Lancet we pointed out some prevailing errors in the treatment of continued fever, which render the mortality from that disease greater than it would be under more judicious management,—nay, greater, perhaps, than if all treatment were dispensed with, and the cases left entirely to nature. At present we propose to say a few words respecting another disease, of still more frequent occurrence than fever, in the diagnosis of which—and thence, necessarily, in its treatment—the gravest errors are daily committed. We allude to the affection termed *hysteria*—a disorder which blends so extensively with the maladies of women that it may be regarded as the principal source of the peculiarities by which their diseases are distinguished from those of the male sex. Nor is this to be wondered at when we consider that hysteria is little else than a morbid exaggeration of the features presented by the physiology of woman in a state of health. The preponderance of the nervous temperament, and the powerful influence of the reproductive system over the whole organism, which characterise the various forms of hysteria, are morbid only from their intensity; in minor degrees they constitute merely the natural peculiarities of woman—peculiarities which are necessary to her physical and moral condition.

It might be presumed, from the great frequency of hysteria, that it must be extremely familiar, in most of its varieties, to every observer of moderate experience. So far, however, is this from being the fact, that divers irregular forms of hysteria are continually mistaken for inflammation and organic disease, even by those who might be expected to know better; and thousands of women have their constitutions undermined and ruined by a long continuance of blood-letting and antiphlogistic measures, employed, blindly, against a disorder which they have a direct tendency to aggravate. Some practitioners seem unable to recognise hysteria excepting when present in the shape of the regular hysteric paroxysm, which is not nearly so frequent as those cases of cerebral and spinal irritation in which hysteria simulates all manner of diseases. Students may imagine, from the perusal of books, that nervous pains are easily distinguished from pains which are of an inflammatory kind, by the absence of constitutional excitement; but if they be endowed with any powers of discrimination they will soon learn the fallacy of this notion when they enter upon practice. In truth, the irregular attacks of hysteria are not unfrequently accompanied with an irritable state of the heart, which exalts the action of that organ, and of the whole vascular system, to an intense degree, and produces a state of pulse which an incautious observer would at once decide to be indicative of inflammatory fever. Now, when such a condition of the vascular system becomes combined with intense local pain in the head, thorax, or abdomen, an aggregate of symptoms is produced which renders the exercise of much skill and sagacity necessary for the discrimination of the case, and puts in requisition every possible means of diagnosis. Where the chest is concerned a skilful auscultator cannot be deceived, but where the head or the abdomen is the seat of local pain we have no such direct aid to diagnosis, and the resemblance of the case to encephalitis or peritonitis is so striking, that any other than an accomplished practitioner is in great danger of being deceived. And here we find a most striking exemplification of the value of *medical physiognomy*—a subject which we have before brought under the notice of our readers. A man who is skilled in this nice and difficult art will at once penetrate the disguise which the protean disease has assumed in such cases as those just described. He will read hysteria in the face, and detect it in the voice, the gesture, and the manner of his patient, and this will lead him to make inquiries into her constitutional

peculiarities, the character of the diseases to which she has previously been subject, and other points, the clearing up of which will free his mind from all doubt as to the nature of the case that is before him. On the contrary, a man who has derived his views of disease merely from books and lectures, and a routine of practice followed without professional enthusiasm, and without that careful cultivation of the senses as well as of the understanding which is so essential to skill in diagnosis—such a man, we say, will be in great danger of forming opinions and adopting measures that must prove derogatory to his own character as a practitioner, and become ruinous in their consequences to his patient, who, having had her malady protracted by the very means that were intended for its cure, may get rid of that particular attack of hysteria only to experience a state of debility which will soon induce another, to be treated in the same blundering manner; until, at last, bloodless, emaciated, and exhausted, she dies prematurely of phthisis, or drags out a miserable existence, the victim of dyspepsia and despondency, tormented with a more frequent recurrence than ever of her hysterical attacks. But such cases, humiliating as they are to medical science, are not nearly so disgraceful as some that are of still more frequent occurrence. In the class of cases which we have been considering there is, at least, a certain difficulty in the diagnosis, to afford a shadow of excuse for mistakes. But how frequent is it to find leeches applied in every case of fixed local pain that presents itself, without the least reference to the constitution of the patient, or the probability of the pain being referrible merely to spinal irritation, such practice, being repeated, again and again, until, in time, it produces the same disastrous consequences as follow with a more rapid step in the cases before referred to.

It is, indeed, no unfrequent occurrence to meet with a woman who has been leeched, and purged, and starved into a mere ghost, for chronic inflammation of nearly every viscus in her body, but who, nevertheless, in reality, has never laboured under any visceral inflammation whatever. Again, violent nervous palpitation, occurring in an hysterical girl, is mistaken for hypertrophy; repeated bleeding is adopted, and the palpitation grows worse, with the addition of an anæmic *souffle*, which is considered by some would-be auscultator as an infallible indication of valvular disease. It will be well for this patient if she fall into the hands of an intelligent practitioner ere her constitution be entirely undermined. Should this, fortunately, be the case, a little carbonate of iron and an improved diet will probably banish both the palpitation and the *bruit*.

In making the foregoing observations we are perfectly aware that they contain nothing which is not familiar to every thoroughly-informed and experienced practitioner; but we have been induced to advert to the subject from a conviction that much ignorance, as well as much carelessness, are still prevalent with reference to the less recognised forms of hysteria, and that innumerable lives are sacrificed to errors in their diagnosis. We would remark, further, that such cases often afford a ground of triumph to the quack over the legitimate practitioner. An hysterical patient, brought to a low ebb of debility and depression by the antiphlogistic treatment of imaginary inflammations, has recourse to an homœopathist, who improves her diet, elevates her spirits with the prospect of a speedy cure, and attacks her malady with infinitesimals, which are equivalent to nothing. Whereupon the young lady gets well, and lauds and magnifies the homœopathist, to whom she really is very greatly indebted, quack though he be.

The organisation of the Paris hospitals is justly considered, by all those who are acquainted with it, to be such as to render them far more efficient in relieving the wants of the poor, and in contributing to the advancement of science, than our own charitable institutions of a similar nature. But, howsoever we may admire the real charity displayed in their management, and the liberal spirit of their medical regulations, yet, on a close inspection, we find imperfections in the governing body which often nullify, to a certain extent, the very regulations to which we allude. The sources from whence the Paris hospitals derive their income are twofold: the rental of the private property belonging to the hospitals, amounting to £250,000, and a subsidy, or kind of poor-rate, furnished by the city of Paris, also amounting to £250,000. The entire management and control of this income of

half a million sterling, as also the nearly irresponsible government of the hospitals, is vested in a Board, or Council, composed, entirely, with one exception, of legal and civic functionaries. The Dean of the Faculty of Medicine is the one in whose favour an exception to this systematic exclusion of the medical profession has been made. Thus, in a body of sixteen individuals intrusted with the government of all the medical charities of a city, the population of which numbers at least a million of souls, the medical interests of the inhabitants of those charities, and the personal interests of those whose knowledge is called upon to alleviate their sufferings, are entrusted to a single physician, who, however willing, however energetic, generally finds himself powerless and alone amongst so many. The result of such an organisation of the governing body may easily be imagined. The members of the Board, looking upon the medical functionaries of the hospitals as persons employed under them, adopt every possible means of making the physicians and surgeons as dependant as possible on the administration, every now and then reminding them, rather harshly, of their relative positions, if they become at all "meddlesome." Thus, in order to ensure more completely this dependance, and to prevent anything like violent opposition on the part of its medical subordinates, as it considers them, the Board has taken care to insert, as a clause in the nomination of the surgeons and physicians, although that nomination takes place by concours, that it will be renewed by the Board every five years, if the Board be satisfied with the previous conduct of the nominee. This clause is rarely, if ever, resorted to in order to sanction the dismissal of a medical officer; but the Board takes care to renew the nomination at the stated periods with sufficient solemnity to strike terror into the breasts of those who have any inclination to be "factious." The physicians and surgeons, therefore, are generally as submissive and silent a body as the Board could wish, each being individually afraid to advance, lest he should endanger his own safety. Their equanimity has, however, been lately sorely put to the trial by a gross invasion of their rights, and their anger has at last got the better of their discretion.

The concours has now been adopted for many years, as the sole means of deciding the appointments of physicians and surgeons to the Paris hospitals. The successful candidates at the concours constitute a kind of supplementary body, under the name of "Bureau Central," from which, in regular rotation, the vacant appointments are filled. As, however, when an appointment in one of the central hospitals becomes vacant, those who are already placed in the hospitals of the suburbs are entitled to take it, the young physicians and surgeons are nearly all at first located in the most eccentric hospitals, and only gradually arrive at the more desirable appointments, after a series of severe ordeals, and years passed in attending hospitals that are situated at a distance from town, at great personal inconvenience. Instigated, probably, by private influence more than by a desire to relieve suffering humanity, or to advance science, the governing Board has lately given to M. GUERIN, the well-known orthopædist, several wards at the Hôpital des Enfans, to enable him, they say, to carry on his experiments in that branch of science. Unfortunately, M. GUERIN does not belong to the hospitals, not being a surgeon of the "Bureau Central," nor is in any other way connected with the administration of the hospital. The Board has also given to M. LE ROY D'ETIOLLES, also well known to the profession by his writings on lithotrity, permission to give gratuitous advice to those among the poor who are affected with urinary diseases who apply for relief at the general receiving rooms of the administration. *Inde iræ;* the young surgeons who form the "Bureau Central," considering these appointments an invasion of their rights, and also an infraction of the concours system, first sounded the alarm, several energetic appeals, both to the medical and non-medical public, being made by them on the subject, through the medium of the press. The seniors of the profession have not, however, left them alone to defend the system to which they nearly all owe their professional eminence, and last week the "Gazette des Hôpitaux" contained the protestations of MM. MARJOLIN, VELPEAU, LISFRANC, BERARD, LAUGIER, and RICORD against the recent appointments,

It is impossible to say what will be the result of these energetic protestations, addressed, as they are, to a non-medical body, but we may nearly calculate on their inefficacy as regards any modification in the appointments which have already been made. It is, however, to be hoped that, seeing

what a strenuous opposition the medical body makes to this infringement of their rights, the Board will hesitate again to incur the odium which attaches itself to such measures.

A remarkable feature in this contest is the great hostility shown by the Paris surgeons to "specialities." The admission which the "specialists" have obtained into the medical bodies by these appointments is universally deplored. This feeling is not peculiar to our brethren of Paris; for illustrious medical men of all ages have continually looked upon "specialism" in disease as nearly inseparable from quackery, and, generally in proportion as they have been supported by the public, they have been anathematised by the profession. In this instance we see that it is a non-medical Board which forcibly imposes "specialities" on the medical public; at the same time it is regretted that such really superior men as M. GUERIN and M. LE ROY D'ETIOLLES should have placed themselves in the position which they at present occupy, by applying for, or accepting, appointments to which they are considered to have no claim. We shall, in an early number, give our readers another illustration or two of the mode in which the Parisian non-medical Hospital Board treats medical matters.

THE MEANS OF RAISING THE CHARACTER AND UTILITY OF THE MEDICAL SECTION OF THE BRITISH ASSOCIATION.

To the Editor of THE LANCET.

SIR,—I read with much interest the observations you have made on the Medical Section of the British Association in a late number of your valuable Journal (LANCET, last vol., p. 871), as requiring, in your opinion, considerable reform to enable it to keep pace with the onward march of the other sections. I am sure that the profession will readily admit that a high tribute of respect has been paid by the association to medical science in assigning it an equal place among the most elevated objects of human intellect, and in allowing its cultivators the same facilities for its advancement that have gained for the other sections an European reputation. I am sorry that this courteous disposition on the part of the association has hitherto not been warmly received by the leading members of our profession, as it is obvious that the dignity and scientific character of medical science would be promoted if such steps were taken as would ensure able representatives from all parts of the kingdom at each congress of the republic of science. If this measure cannot be accomplished, then, Sir, we must acquiesce in your remark that it is better to relinquish Section E, or to change its foundation, rather than it should not be worthy either of the character of the profession, or of the progress of the sister sections. It cannot be said that there are not ample materials for rendering the Medical Section most effective, when we see many of the able men who used to be its ornaments, now preferring to communicate papers to the Sections of Chemistry and Botany, Zoology and Statistics, where they are always sure of a popular reception. If the Medical Section were rendered sufficiently attractive, many of the communications that now enrich the other sections, and are listened to with delight by a numerous audience, would remain in their own; but as long as that section stands, *per se*, with such slight support from its members, we cannot expect that the able authors of the papers in question will estimate lightly the *eclât* that attends the reading of a brilliant paper where they are certain of the applause not only of the learned but of the fair. Yet even with these disadvantages I should hope that, under suitable guidance, most valuable elements exist in the Medical Section for promoting the higher investigations of our profession, and that by the stimulus which it might afford in the pursuit of new discoveries, by its close examination of points of practice as yet undetermined, and by its well digested reports on matters of popular as well as professional interest, the Medical Section might hold in these countries that high position in science which the Academy of Medicine has obtained in France.

Allow me, Sir, to venture to remark that the details of conduct for the section might be improved. There is no *committee of management*, annually appointed, which might regulate the proceedings of the ensuing meeting, so that the whole arrangement devolves on the medical gentlemen of the locality, who are unable to act, from non-acquaintance with the order of proceeding, never having, in all probability, attended a meeting of the association in their lives. I am

sure that the appointment of a *permanent* medical secretary would be of great advantage to Section E,—some one who would know where to look for valuable communications, and make arrangements so as to keep the interest of the section unabated. This appointment might easily be made without trenching on the province of the general assistant secretary, whose duties are much too onerous to admit of his attending to the particular sections. It is due to Professor Phillip to say that in this city he has merited the highest praise, both for his great urbanity of manner, and the admirable dexterity with which he managed the unwieldy details of so great a meeting; but I need appeal to no other argument to show the advantage of a branch secretary than his own section, which is second in effect to none of the others. I would also wish to notice an erroneous impression which may operate unfavourably to Section E, viz., that a paper cannot be received without the presence of the author. Now, as members of our profession have not the same latitude in going from place to place that others possess, such an opinion must be peculiarly injurious to the Medical Section.

I would wish, in conclusion, to state that at the recent meeting in Cork many of the physicians of this locality who could have given valuable communications to the section were deterred from writing by a hospitable wish to allow their highly-gifted brethren whom they expected both from the sister country and their own, to occupy the public attention. Our disappointment, then, was great when we found, at the eleventh hour, that our invited guests were unable to come. If, then, any marks of haste are to be found in the proceedings, I am sure that they will be kindly excused. I am happy to say that the greatest good feeling everywhere existed, and that in this city the good effects of the late meeting of the British Association will be long visible. Independently of the gratification arising out of the extension of knowledge, there is another reason, peculiar to us as Irishmen, for which we shall look back with pleasure to the year 1843, namely, that it was the date of many a new friendship, and the revival of many a valued association, which we shall long cherish among the recollections of the past. With much respect, I have the honour to remain, Sir, your most obedient servant,

JOHN POPHAM, M.D.,
One of the Secretaries of Section E.
Cork, October 9, 1843.

CHARTER
OF THE
ROYAL COLLEGE OF SURGEONS OF ENGLAND.

(GRANTED SEPTEMBER 14, 1843.)

VICTORIA, by the Grace of GOD, of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith, to all to whom these presents shall come greeting. Whereas the Body Politic and Corporate of the Royal College of Surgeons in London was incorporated or re-established under or by virtue of a certain Charter or Letters Patent, bearing date at Westminster, the twenty-second day of March, in the fortieth year of the reign of King George the Third, or otherwise, as in such letters patent mentioned or referred to, and the said college is now regulated and governed by and according to the provisions of such charter or letters patent, and a certain other or supplemental charter, granted by letters patent bearing date at Westminster, the thirteenth day of February, in the third year of the reign of King George the Fourth, and also by or according to certain by-laws and ordinances made by the said college for its regulation and better government.

And whereas the body politic and corporate of the said college at present consists of persons created members of the said college by the said first mentioned charter, or constituted such members by letters testimonial, under the common seal of the said college, of the respective qualifications of such persons to practise the art and science of surgery. And the governing body of the said college consists of a council of twenty-one of the members of the college, ten of them being also examiners of surgeons for the college, and one of such ten persons being also the president and two of them the vice-presidents of the college and the two principal serjeant-surgeons to us and to our heirs and successors and the surgeon-general to the forces, of us, our heirs, and successors, provided they shall have been chosen members of the council, have at present a preference of being admitted examiners of the said college before all other persons whenever vacancies happen in the court of examiners of the college.

And whereas, in order more effectually to promote and encourage the study and practice of the said art and science of surgery, it appears to us expedient that a new class of members of the said college, to be called fellows, should be created, and (with the exception of the first fellows hereinafter named and directed and authorised respectively to be appointed), be required, in order to obtain the diploma of their fellowship, to have attained a greater age than is at present necessary in the case of ordinary members of the said college, and to have complied with such rules and regulations, and

passed such examination as hereinafter mentioned; that the number of the members of the council of the said college should be increased, and that all future members of the council be chosen from the fellows of the college and hold their office for a limited period only, instead of for life, and that the right of electing members of the council be transferred from the council (with whom such right now resides) to the body of such fellows; that alterations be also made as regards the election and admission and continuance in office of the future examiners of the college, and that certain further powers and privileges should also be granted to the said college. Now know ye, that we, of our especial grace and mere motion, at the humble petition of the said Royal College, have willed, ordained, constituted, and declared and granted, and by these presents for us, our heirs, and successors, do will, ordain, constitute and declare, and unto the said Royal College of Surgeons in London do grant, in manner following, to wit:—

1. That from henceforth the corporate name or style of the said college shall be—The Royal College of Surgeons of England, and that a portion of the members of the said college shall be fellows thereof by the name or style of the Fellows of the Royal College of Surgeons of England.

2. That the present president and two vice-presidents, and all other the present members of the council of the said college, and also such several other persons, not being less than two hundred and fifty, nor more than three hundred in number, and being members of the said college, as the council of the said college, at any time or times before the expiration of three calendar months from the date hereof, shall elect and declare to be fellows in manner hereinafter directed, together with any such other persons as the council of the said college, after the expiration of the said three calendar months, and within one year from the date hereof, shall think fit and shall appoint in manner hereinafter authorised, shall be fellows of the said college.

3. That the council of the said college, with all convenient speed after the date of these our letters patent, and before the expiration of three calendar months from the date hereof, and in such manner as the said council shall deem best, shall elect to be fellows of the said college any such number of persons, being members of the said college, and not being in the whole less than two hundred and fifty, nor more than three hundred, as the said council shall think proper; and also shall, before the expiration of such three calendar months, by one general diploma, under the seal of the said college, and in such form as the council shall think fit, declare, or cause such persons to be declared fellows of the Royal College of Surgeons of England accordingly; but the names of all such persons, so declared fellows, shall be contained and set forth in a schedule to such general diploma. And such general diploma shall also, within two calendar months after the seal of the said college shall have been affixed thereto, be enrolled in our High Court of Chancery.

4. That it shall also be lawful for the council of the said college, at any time or times after the expiration of the said three calendar months and before the expiration of one year from the date hereof, by diploma or diplomas under the seal of the said college, and in such form as the said council shall think fit, and without any fee, to appoint any other person or persons (being a member or members of the said college) to be a fellow or fellows of the said Royal College of Surgeons of England.

5. That, except as hereinbefore mentioned, no person shall become or be admitted a fellow of the said college until after he shall have attained the age of twenty-five years, and shall also have complied with such rules and regulations as the council of the said college shall from time to time consider expedient, and by a by-law or by-laws direct, nor unless he shall have passed such special examination by the examiners of the said college, as the council shall from time to time think fit, and by a by-law or by-laws direct, that candidates for a fellowship of the said college shall undergo; but every fit and proper person having attained such age, and complied with such rules and regulations, and passed such special examination, shall be entitled to be admitted a fellow of the said college.

6. That the admittance of every such new fellow as last mentioned, shall be by diploma under the seal of the said college, in such form as the council of the college shall from time to time think fit and direct; and that every person so admitted a fellow of the said college, and not being already a member thereof, shall also, by virtue of such his admittance as a fellow, become and be considered admitted as a member of the said college.

7. That the fee to be paid on the admittance of every such new fellow as last aforesaid (over and besides the stamp duty on his admittance or diploma), shall be any such sum not exceeding the sum of thirty-one pounds ten shillings, as the council of the said college shall from time to time think fit, and by a by-law or by-laws direct.

8. That where several diplomas shall be granted on the same day (whether to such new fellows as last aforesaid, or to any fellows to be created after the said first three calendar months, and within the first year from the date hereof as aforesaid), such diplomas shall be numbered under such regulations as the council may think fit, in order to show the order and priority of such diplomas among themselves.

9. That the council of the said college shall cause the name of every fellow for the time being of the said college, and if thought fit by the council, together also with the place of residence of every such fellow, to be entered according to their several seniorities (in the manner and to be determined or ascertained respectively as hereinafter mentioned), in a book or register to be kept for that purpose at the hall of the said college, or such other place for the time being as the said council shall direct; and such book or register of fellows, at such times and subject to such reasonable and proper regulations as the council for the time being shall think fit and direct, shall be open to the inspection of any member of the said college (whether fellow or not), at the hall of the said college, or other place appointed for the time being for the custody of the same. And the seniority of such fellows to be entered in such book or register as aforesaid, shall be and be determined or ascertained respectively as follows, that is to say, the present president shall be entered first, the two present vice-presidents, according to their respective seniority, next after him, and then all the other present members of the council according to their respective seniorities; and immediately after such the present members of the council; the fellows to be elected within three calendar months from the date hereof as hereinbefore directed, according to the order and priority of their names, as the same shall be contained and set forth in the schedule to such general diploma, whereby they shall be so declared fellows as hereinbefore directed; and, with respect to all other fellows, their names shall be entered according to the dates of their respective diplomas; and when the diplomas of any fellows shall bear date on the same day, then as regards or between such fellows according to the order and priority in which the diplomas shall be so numbered, as hereinbefore directed.

10. That from henceforth no member of the said college, who shall not also be a fellow of the same, shall be eligible as a member of the council of the said college; nor (but subject and without prejudice to the validity of any election to be made as hereinafter directed) shall any fellow be so eligible whilst practising midwifery or pharmacy, or who shall have practised midwifery or pharmacy at any time during the five years next preceding the day of election, nor unless he shall reside and *bonâ fide* practise his profession of surgeon within five miles by highway or road from the General Post-office in St. Martin's-le-Grand. And if any member of the council shall at any time after his election practise midwifery or pharmacy, or shall cease to reside and *bonâ fide* practise his profession of surgeon within five miles of the General Post-office, as aforesaid, he shall be liable to removal from the council.

11. That the present members of the council of the said college shall be and continue life members thereof as heretofore, and that the number of the members of the council shall, in the manner hereinafter mentioned, be increased from twenty-one to twenty-four, and that all future members of the council shall be elective, and be elected periodically, in the manner and subject to the regulations hereinafter mentioned and directed.

12. That upon the first Thursday in the month of July in the year one thousand eight hundred and forty-four, or within one calendar month afterwards, and in the manner hereinafter mentioned, three fellows of the said college shall be chosen to be additional members of the council of the said college; and that upon the first Thursday in July in every succeeding year, for ever thereafter, or within one calendar month afterwards, and in the manner hereinafter mentioned, three fellows shall be chosen to be members of the council; and in every such succeeding year in which there shall be no vacancy, or less than three vacancies among the life members of the council, three of the elective members of the council, or such less number of such elective members as, with the number of vacancies in that year among the life members, will make up the number three, shall go out of office upon the day whereon such three fellows shall be chosen to be members as aforesaid, so that the number of the council shall at no time exceed twenty-four; and in every such succeeding year in which there shall be three or more than three vacancies among the life members, none of the elective members shall go out of office in that year, and three fellows, and three only, shall be chosen to fill up three of such vacancies among the life members, and the remaining vacancy or vacancies of that year (if any) shall be considered and treated as a vacancy or vacancies among the life members in the following year or years, as the case may be or require. But from and after the period when the number of the elective members of the council shall be completed and made up to twenty-four, three of the members of the council shall go out of office every year, upon the day whereon three new members shall be elected, as aforesaid. But in all cases fellows going out of office shall notwithstanding be eligible for nomination and immediate re-election, and, continuing eligible in other respects, their names shall be announced to the meeting accordingly in the order and manner hereinafter directed.

13. That the elective members of the council, who shall from time to time go out of office in the manner hereinbefore mentioned and directed, shall be those who shall have been longest on the council without re-election; and in the case of fellows elected upon the council in the same year, those shall first go out of office whose names stand lowest

(among those elected of the same year) on the book or register of the fellows of the college.

14. That whenever any vacancy or vacancies shall take place among the elective members in any other way than by their going out of office by rotation as aforesaid, such vacancy or vacancies shall be filled up by the election (upon some early and convenient day to be fixed by the council for that purpose) of a substitute member or members in the room of the person or persons whose place or places shall have so become vacant; and every person so elected to fill up any such vacancy shall hold such office until the time when the person in whose room he shall be chosen would have been liable to go out of office, and he shall then go out of office accordingly, but shall notwithstanding be eligible for nomination and immediate re-election, and, continuing eligible in other respects, his name shall be announced to the meeting accordingly in the order and manner hereinafter directed.

15. That the members of the council of the college shall hereafter be elected by the fellows of the said college, including the members of the council as such; and such fellows, whether members of the council or not, shall be allowed to vote in person only and not by proxy; and that any number of fellows (not being less than fifteen present) at a meeting convened for the purpose of electing a member or members of council, shall be competent to proceed to such election.

16. That the chair at every such meeting shall be taken by the president of the said college, or in his absence by one of the vice-presidents, or in case also of their absence, then by the senior members of the council of the said college then present. And if it shall so happen that from any cause the business of the day cannot be concluded upon such the day fixed for election as aforesaid, then and in every such case an adjournment of the meeting shall take place to the next day, at an hour to be named by the chairman (Sundays, Christmas-days, and Good Fridays, excepted, and being passed over when occasion shall require), and so from day to day (except as aforesaid) until the business of the meeting shall be completed; but no other business shall be discussed or attended to at any such meeting besides the election of a member or members of the council, for which the same shall have been convened. Provided also, that if upon the day fixed for any such election there shall not be fifteen or more fellows assembled and continuing together for the purpose of such election, then at any time after the space of one hour after the time of day fixed for such election, the chair may be taken as aforesaid, and it shall be lawful for the chairman to adjourn the meeting to the next day, and so from day to day (except as aforesaid) if necessary, in the manner hereinbefore mentioned with respect to adjournments of such meetings in case of the business thereof not being concluded as aforesaid.

17. That such previous notice or notices of every election of a member or members of the council shall be given as the council shall from time to time think fit, and shall by a by-law or by-laws determine and appoint, and that, subject only to the regulations and restrictions in these our letters patent mentioned or contained, the election of members of the council shall be conducted in such way and manner as the council shall from time to time think fit, and shall by a by-law or by-laws also determine or regulate and appoint, but such election shall always be by ballot, and be decided by a majority of balls or votes, and every fellow who shall be eligible to be elected according to the regulations and restrictions contained or mentioned and authorised in or by these our letters patent, shall be announced to the meeting as a fellow eligible in the order and according to the priority in which his name shall stand in the book or registry of fellows; and if he shall be thereupon nominated in such mode as the council shall by by-law or by-laws provide for the general nomination of members at elections, he shall be balloted for accordingly, but not otherwise.

18. That when any eligible fellow shall have been passed by for want of any such nomination as aforesaid, or having been balloted for shall not be elected a member of the council, he shall cease to be eligible to be elected, except upon such special terms of nomination as shall by the council by by-law be for the time being provided for such cases, and upon such special terms any fellow so passed by or not elected, may be re-nominated for and be elected a member of the council, but if he shall be on such second occasion either passed by or not elected, he shall for ever thereafter cease to be eligible for election upon the council.

19. That no fellow whatever shall be eligible to be a member of the council unless at the time of his nomination for election as such there shall also be produced and delivered in, in such way and manner and in such form as the council shall from time to time think fit, and by by-law regulate and appoint accordingly, a certificate in writing signed by such number of fellows as by such by-law shall be required, that, or to the effect that such fellow so nominated is a fit and proper person to be a member of the council, and particularly that he does not practise, and has not within five years practised midwifery or pharmacy, and that he resides and *bonâ fide* practises his profession of a surgeon within five miles by highway or road from the General Post-office in Saint Martin's-le-Grand, and such nomination and certificate being delivered in the manner required, the same (as regards the matters or particulars so to be certified as aforesaid,

but no further) shall be final and conclusive as to the right of such fellow to be balloted for as a member of the council, and also to be elected such member if upon the ballot he shall be so elected.

20. That there shall be ten examiners of surgeons for the said college, and the present examiners shall be and continue such examiners for life as heretofore. But that the two principal serjeant-surgeons to us and to our heirs and successors, and the surgeon-general to the forces of us, our heirs, and successors, or any of them, and although they may be chosen members of the council of the said college, shall no longer have any preference of being admitted examiners of the said college before other persons; and that all future examiners of the said college shall be elected by the council of the college, either from the members of the council or from the other fellows of the said college, or from both or either of them; and that all future examiners of the said college shall hold their office of examiners during the pleasure of the council, and so long only as the council of the college shall think fit.

21. That the president and vice-presidents of the said college shall no longer be chosen exclusively from or out of the examiners of the said college, but from or out of all the members of the council indifferently, and whether examiners of the college or not. And that any number of examiners of the college, not being less than six, shall be sufficient to form a court of examiners, and with or without the president or vice-presidents of the college, or any of them (and whether or not the president or vice-presidents, or any of them, may be examiners).

22. That if it shall at any time hereafter appear that any present or future member, or any fellow of the said college, to be appointed or admitted at any time after the expiration of the said first three calendar months from the date hereof, shall have obtained his letters testimonial or his diploma respectively by any fraud, false statement, or imposition, or that either before or after obtaining such his letters testimonial or diploma, he shall have violated any by-law, rule, or regulation of the said college, then and in every such case, and after such previous notice to, and such hearing of, such member or fellow as, under the circumstances, the council of the said college shall think proper, it shall be lawful for such council to recall and to declare the letters testimonial or diploma respectively of such member or fellow to be void, and thereupon every such member or fellow shall cease to be a member, or a member and fellow of the said college, as the case may be accordingly.

And we do further declare our will and pleasure to be, that except in the respects hereby altered, the said college and the council of the same shall continue to have all such and the same jurisdiction, powers, authorities, and discretions, for and with respect to the government of the said college and the election and choice of the officers of the same, as well as the admission and expulsion of members and fellows, and for the making, ordaining, confirming, annulling, or revoking by-laws, ordinances, rules, and constitutions, and transacting and ordaining all other matters and things whatsoever for the regulation, government, and advantage of the said college, as such college and the council thereof respectively now have under or by virtue of the said two several hereinbefore recited or mentioned charters or letters patent, or either of them respectively, or in any other lawful manner.

And we do hereby for us, our heirs, and successors, grant and confirm unto them all such jurisdictions, powers, authorities, and discretions accordingly; provided always, and it is our further will and pleasure, that no by-law or ordinance hereafter to be made by the said council shall be of any force until our approval thereof shall have been signified to the said college under the hand of one of our principal Secretaries of State, or the same shall have been otherwise approved in such manner as shall be directed by us, with the advice and consent of the Lords Spiritual and Temporal and Commons of our Realm, in Parliament assembled.

And we do hereby for us, our heirs, and successors, further grant unto the said college, that these our letters patent, or the enrolment or exemplification thereof, shall be in and by all things good, firm, valid, sufficient, and effectual in the law, according to the true intent and meaning thereof, notwithstanding the not fully or not duly reciting the said several letters patent, or the dates thereof, or any other omission, imperfection, defect, matter, cause, or thing whatsoever, the same or any rule or law to the contrary thereof in anywise notwithstanding. In witness whereof we have caused these our letters to be made patent. Witness ourself at our Palace at Westminster, this fourteenth day of September in the seventh year of our reign.

By Writ of Privy Seal,

EDMUNDS.

MEDICAL SOCIETY OF LONDON.

Monday, October 16, 1843.

MR. PILCHER, President.

CASE OF POISONING WITH THE FUMES OF ARSENIOUS ACID. DISCUSSION ON POISONING AND THE EFFECTS OF REMEDIES.

DR. G. BIRD related the following case, not altogether for its novelty, but for the anxiety and difficulty which were often experienced in forming an opinion respecting cases of insidious poisoning. This was often the case with respect to insidious poi-

soning by lead. In the present instance the deleterious agent was arsenic in the form of vapour. The subject of the case was a stout, hale, and hearty man, forty-four or forty-five years of age, by trade a watch-dial enameller. It appeared that he had made some improvement in the art of enamelling, the essential addition to the old process consisting of arsenious acid. To prepare his compound he mixed four pounds and a half of oxide of tin and carbonate of lead with three or four ounces of arsenious acid. These were fused in a "skittle-pot," poured into water, and then again fused. During the whole of the process arsenious acid, in the form of vapour, was evolved, as was known to the operator by its peculiar sweetness to the taste. Usually he was very careful in the preparation, and prevented the vapour acting injuriously to him by wearing a hood. On Tuesday week, however, he made the preparation late at night, without taking the usual precautions. He soon became sensible of an extreme dryness of the throat, much constriction of the fauces, and general uneasiness. He slept for a few hours, but on awaking found his symptoms increased rather than diminished. He had uneasiness of stomach, with nausea, occasional vomiting, a colicky feeling in the bowels, and difficulty of breathing. These symptoms persisted and increased, and in three or four days profuse malæna came on; he vomited blood, and his sputa were tinged with that fluid. Dr. Bird was called in on the twelfth day. He found him labouring under symptoms very similar to those of fever, but without that cerebral depression or heaviness about him which characterise the latter state. The skin, however, was very hot; the eyes were retracted; face pale, except a flush on each cheek; the tongue was furred, with a red streak down the middle and redness of its tip; the pulse was throbbing and hard; there was pain at the scrobiculus cordis; the last motion had been free from blood, although it was of that black pitch-like character which is common to motions in which disorganised blood is contained. There had been no vomiting for the last few days. On placing the ear to the chest the posterior lobes of both lungs were found to be affected with pneumonia, and the lower lobes on both sides were partially consolidated; that morning (Monday, the next day) the peculiar sputa indicative of pneumonia made their appearance. Now, in this case it was clear that there was pneumonia and gastro-intestinal irritation. The treatment, therefore, was directed at once to relieve these two conditions. Cupping to eight ounces over the chest, and an emulsion, containing castor oil, were ordered. The blood was cupped and buffed. The pneumonia was removed, and it was hoped that the case would terminate well. Now, it might be a question whether in this case the symptoms were really dependent upon the arsenic. He (Dr. Bird) thought that they certainly were, not only from their want of resemblance to idiopathic fever in many important points, but also from their resemblance to those effects which he had seen result from arsenic in the inquiry respecting the arsenical candles, although in the last instance the symptoms were much less severe. In answer to questions Dr. Bird stated that there had been no eruption of the skin present in the case detailed, nor any peculiarity about the eyelids. He had only seen two cases in which there was an eruption of the skin, consequent upon arsenic, and this was in cases in which the mineral was taken as a poison. In one of these instances a woman had swallowed half an ounce of arsenious acid; she was admitted shortly after into Guy's Hospital; the stomach was emptied by the stomach-pump. On the second day after her admission, and when gastritis was at its height, the skin became covered with a pale papular eruption, about the size of half a split mustard-seed, somewhat resembling prurigo mitis, only larger. A model of this eruption had been placed in the museum at Guy's. In another case in which arsenic had been taken as a poison, the eruption had also appeared on the third day. He had only seen one case in which a patient had recovered after taking arsenic as a poison, and in this instance, with a view to render the poison more speedily fatal, the person had combined laudanum with it. The laudanum, however, appeared to have prevented absorption and given time for the action of remedies. In cases of poisoning by arsenic he had witnessed none of the squamous eruptions mentioned by German writers.

Mr. HEADLAND remarked on the difficulty of "diagnosis" as to the cause of such a train of symptoms as those enumerated in Dr. Bird's case. In the absence of information respecting the inhalation or swallowing of arsenic, would not the practitioner consider the case to be one of gastro-enteritis occurring suddenly? He had no doubt as to the cause in the case under discussion. Could there not in such a case be any direct antidote applied to the poison in addition to the treatment resorted to in a common case of gastro-enterite?

Dr. G. BIRD had no doubt that in the case he had related the symptoms were the result of the inhalation of the vapour of arsenious acid. As to the question of the administration of an antidote, it might be asked whether we really possessed any antidote to arsenic? He knew but of one, and that was the hydrated sesquioxide of iron, which he had seen of use in one case. This antidote might be of service when arsenious acid had been recently taken into the stomach, as it combined with it and formed an insoluble salt, and might be in this state re-

moved. But it was known that arsenic got entangled in the course of a few hours in the mucous follicles of the stomach, even in cases where the stomach-pump had been used, and other means resorted to for its removal. He thought, in this case, that the gastro-enterite should be treated without any antidote, for he did not believe that this patient's stomach contained any of the poison in substance, the poisonous effects having been merely the result of the application of the arsenical fumes to the mucous membrane of the mouth and fauces. It was well known that poisons might act independently of absorption, by getting into the circulation, or by coming in contact with the sentient nerves in a mucous membrane.

Dr. THEOPHILUS THOMPSON observed that blistering of the feet had been stated to be the result of arsenic taken in large doses, or as a poison. In one case in which he had employed arsenic for a long period, and until it produced nausea, blistering of the feet also occurred; he had not, however, in this case, attributed that symptom to the arsenic. He had been often struck with the different susceptibility of different persons to the influence of arsenic. In some cases of psoriasis and eczema in which he had used this medicine, even in three or four days the eyelids became stiff, and other deleterious effects of the medicine presented themselves, whilst in other instances no injurious effects followed, although the medicine was continued for months. In the copper-works near Swansea, in which the workmen were much exposed to the fumes of arsenic, he had discovered little disease among them, and had found, also, that the average duration of human life was as great as in places in which arsenic was not employed. The foreman of the works had informed him that the susceptibility of the workmen to the influence of the arsenic was soon tested, and when they became affected they were immediately discharged, whilst those who were unsusceptible remained. Dr. Bird's explanation of the cause of the symptoms in the case he had detailed was plausible, but not altogether satisfactory, for he (Dr. Thompson) thought that when the arsenic were inhaled, as in that case, it would permeate the system, and so modify the nervous system as to render its effects persistent and not so readily removable as they had been in this instance. When gastro-enteritis was the result of poison it was different from idiopathic inflammation, and, judging from the effects of mercurial remedies in cases of lead-poison, it was benefited by those agents when combined with other treatment, whereas, in idiopathic gangrene the contrary was the case.

Dr. BIRD explained that the effects of the arsenic in his case had been somewhat relieved only, and not removed, as Dr. Thompson supposed.

Dr. CHOWNE had seen several cases of poisoning by arsenic, and many instances in which the mineral had been employed remedially, but he had never known blistering of the feet as the result. He thought, in Dr. Bird's case, that the symptoms were the result of the inhalation of the arsenical fumes. Arsenic, in whatever way it was introduced into the system, usually affected the stomach.

Mr. HEADLAND remarked that if the person affected in Dr. Bird's case had not known that he had been subjected to the influence of arsenical fumes, and had not experienced a sweet taste in his mouth, it would have been difficult to have thought that the effects were those of arsenic. He thought it important to dwell on the gastro-enterite as the result of the inhalation of the arsenical fumes. He was unacquainted with any other metallic gas which produced the same effects. Aconitine, rubbed on the surface, he had seen produce a remarkable state of the fauces, amounting to distinct tonsillitis, and evidently the result of that medicine. This fact was as clear as the established one of the effect of belladonna on the iris. The *specific* effects of remedies were of much interest and value.

Dr. CHOWNE believed that the susceptibility to the effects of arsenic in some persons was so great that it was impossible to get the system accustomed to it, and either the medicine must be left off or the patient sank. Different constitutions would bear different quantities. In factories in which arsenic was employed much depended on the means resorted to for carrying off the fumes, &c. The effects of arsenic in the neighbourhood of factories in which it was employed was most deleterious, both to vegetation and to animals.

Dr. T. THOMPSON did not know what means were taken at Swansea to prevent the ill-effects of the arsenic. He had noticed the results mentioned by Dr. Chowne. The same fact, with regard to susceptibility and non-susceptibility to the deleterious influence of lead, had been confirmed in the Leith lead-works.

Dr. CHOWNE mentioned a case of severe and long paralysis of both hands and arms in a tailor, who had come into contact with lead merely by working in a newly-painted room.

Dr. L. STEWART said that much of the "susceptibility" to the influence of lead would depend on the habits of the workmen and of the precautions which they took. He had found the colliers complain of the deleterious effects of Davy's lamp, but it was evident that their health had suffered only from the longer period which the lamp enabled them to work than they could have done previous to its use.

Dr. WILLSHIRE thought that facts respecting the peculiar effects of medicines on the

system, such, for instance, as the production of tonsillitis by aconite, were of great value. It was often a question with the practitioner, when employing powerful remedies, as to where he should stop; the production of any symptom peculiar to the drug would answer this question. He had often employed belladonna for pectoral affections, and he had seen this medicine, when given in a quarter of a grain doses, three times a day, produce a scarlet irritable rash, and a dryness of the throat; this latter symptom he thought indicative of the extent to which the remedy might be carried. When giving this medicine now he invariably asked the patient if there was any dryness of the throat, and if he found there was he either left off the medicine or diminished its dose. He had seen a kind of "talkative delirium," as the result of hemlock. Dr. Copland had mentioned in his Dictionary that hæmorrhage from the fauces and inflammation of the back of the pharynx had resulted from taking aconitina. He (Dr. Willshire) believed that belladonna and hemlock acted as specifically on the pneumogastric nerve as digitalis did on the vascular system.

Mr. ROBARTS had seen urticaria produced by belladonna, but not the red rash mentioned by Dr. Willshire.

Dr. LEONARD STEWART made some remarks on the preference which some medicines showed to affect particular parts of the system, as belladonna the iris, &c., and thought that our attention should be more strictly confined to these preferences.

Mr. HEADLAND drew attention to the circumstance of the little progress medical men had made in their knowledge of the action of remedies, being at the end of fourteen hundred years possessed, as Colton had said, of only two "specifics." Looking at the ill success which had attended the observations of physicians on this point, he thought it would be more useful for the members of the society to determine the specific action of one remedy rather than divide their attention among so many. The result of the night's discussion would show the expediency of his.

Elementary Instruction in Chemical Analysis. By Dr. C. R. FRESENIUS, Chemical Assistant in the Laboratory of the University of Giessen. Edited by LLOYD BULLOCK, late of the Giessen Laboratory, &c. London: J. Churchill, 1843. 8vo, pp. 284.

A REVIEW of this book has been written by Professor Liebig, and here it is, short and acceptable, for a more competent critic of its contents could not be found to ornament with his remarks the pages of our Journal:

"Dr. Fresenius (says Liebig, in a preface to the volume), conducts the elementary instruction in mineral analysis in the laboratory of Giessen University, and during the two last sessions has followed the method described in the present work. That method I confidently recommend to all who desire to obtain instruction in the analysis of inorganic substances, from my own personal experience of its simplicity and usefulness, and the facility with which it may be understood. As an introduction to Professor Rose's excellent Manual, and for adoption in institutions where practical chemistry is taught, I consider the work of Dr. Fresenius to be extremely serviceable; but it is especially adapted to the use of pharmaceutical chemists. Further, a number of experiments and discoveries which have recently been made in our laboratory, by enabling Dr. Fresenius to give many new and simplified methods of separating substances, will render his work equally welcome to those persons who already are familiar with the larger works on inorganic analysis."

To these observations Mr. Bullock, a very fit editor for the English edition, adds his testimony of the author's ability to discover the wants of students who are entering upon the practice of chemical analysis, and to devise for them an effective method of study, his opportunities of learning the value of "a rigid economy of time," and seeing adopted "every improvement in *method*" that ingenuity in chemistry could suggest, having been most abundant at Giessen. For the present volume the last corrections and additions of science have been supplied from that place to Mr. Bullock by Dr. Fresenius.

On our own parts, as critics, we may add that in every respect the present publication is well-timed and acceptable in England. Chemistry is rapidly extending its attractions, not only in our own profession in this country, but amongst manufacturers and agriculturists, and all classes of educated men. Great changes and improvements in practical medicine may be anticipated from the application of chemistry to pathology, and very many practitioners, foreseeing this, plainly enough, are devoting their leisure to obtain a far deeper insight into the science than the medical schools of England at present impart, and to acquire the skill that is necessary for original investigation. The course of study laid down to assist them, in Dr. Fresenius's work, is excellent. It must be acknowledged that in this country no professor is exactly in a position to produce such a work, because we have not here any *school of practical chemistry*, where *numerous students* occupy *their whole time*, and devote their entire energies to the science,

amid suitable implements, aided by equally devoted, experienced teachers; and it is only in such schools,—of which that at Giessen is an example,—that a course of study suited to every person, and thoroughly effective for its purposes, could be worked out. It cannot, however, be long before such an establishment finds a safe basis for success in England. We have in the present volume the result of many years of experience, and the combined aid of many heads, occupied constantly in a perfect laboratory.

It is right, before closing our notice, to observe that in this work the student is supposed to have already acquired a knowledge of the theories and leading truths of the science, and that it therefore commences with directions for the preparation of the necessary tests, and for examinations to secure their purity. A list of the apparatus required shows us at how little expense chemistry can now be pursued. It is not necessary that we should describe the preliminary order of study laid down by Dr. Fresenius. When the student has made himself master of that, he is qualified to examine compound bodies, beginning with those which contain only one acid and one base, and gradually extending the investigation to complex combinations and mixtures, whence he is led, step by step, until he has analysed all the compounds coming within the range of the pharmaceutist and manufacturer, and then he may fairly be presumed to be qualified to enter upon original investigations.

THE

LATE FATAL CASE OF SUPPOSED STRICTURE OF THE RECTUM AT BATH.

To the Editor.—Sir: I beg to state, for the information of the readers of THE LANCET, that at a meeting of the Bath and Bristol Provincial Medical Association, held at Bath, on the 28th ult., a statement of the case of the lady who, it was alleged, fell a sacrifice to treatment for stricture of the rectum which had no existence, was made by the individual who conducted that treatment. The statement in question was *ex parte*, and the president, actuated, no doubt, by a charitable discretion, expressed his opinion and decision that no discussion should be permitted to take place upon it. I will only allow myself to remark that professional truth and public interest would have been advanced had an opposite course been adopted, and something like a fair opportunity afforded to give utterance in public to opinions and feelings of which, in private, no secret is made. I am, Sir, your obediently,

MEDICUS.

Bath, Oct. 12, 1843.

LONG REPLY TO A SHORT QUESTION.

To the Editor of THE LANCET.

SIR,—In THE LANCET of the 30th September (page 960) an anonymous writer has made observations on me for connecting myself with an hydropathic establishment recently formed here; had the writer the manliness to sign his real name to these observations I should then know who I had to deal with, but, assassin like, he screens himself behind "D. D. G."

That hydropathy has caused some stir and done much good, there can be no doubt, numerous cases cured (not benefited by medicines, although under skilful hands for a long period) testifying; and I entertain a belief that you will agree with me *that where medicines have failed, water treatment may be fairly tried.* I have not the honour of your acquaintance, but I expect from you that courtesy which I should not refuse you if similarly circumstanced, namely, the name of the writer.

The hydropathic establishment is not mine; I am only the consulting physician to it, under whose direction the various processes are conducted in accordance with medical science; neither is the college establishment speculation mine; but I freely confess it is not as productive to either or any of the lecturers in the Cork School of Anatomy, Medicine, and Surgery, as it might have been made by them, had they not been so strict in requiring *regular* attendance *from pupils*, or adopted the practice of selling certificates for non-attendance *at lectures*. Perhaps you are not aware of such having been done; and if "D. D. G." would aid you in bringing to light those benefited, he shall have the humble assistance of the Dr. Wherland, who, at the recent meeting of the British Association, read a case to the Medical Section (*specially well attended*, as stated by the secretary), and who has for many years refused the *proffered gold* with indignity, thereby endeavouring to uphold, as far as in his power lay, *even to a personal loss*, the medical profession.

In conclusion, no one can respect the profession more than I do; and although I may be abused and reviled *by some*, for the adoption of water treatment for the cure of diseases remediable by medicine), I only do my duty to those patients who favour me with their confidence in resorting to that course most beneficial to their interests. Soliciting the

favour of the insertion of this reply to "D. D. G.," I have the honour to remain, Sir, your obedient servant,

J. R. Wherland, M.D.

Cork, October 9, 1843.

MARISCHAL COLLEGE, ABERDEEN.

To the Editor.—Sir: I am desired by the members of the Medical Faculty of this University to request that you will do them the favour to insert, as medical intelligence, in the pages of The Lancet, the accompanying regulations of the college for granting medical degrees. I am, Sir, your most obedient humble servant,

Alex. Harvey,
Secretary to the Medical Faculty.

Oct. 13, 1843.

*** We would give them a place in our columns with pleasure, but really have not space at present to do so. But we publish the note of Mr. Secretary Harvey to have the opportunity of saying that which will equally serve the purpose of the Faculty, namely, that any person who desires to obtain a degree at Aberdeen, or the diploma of the college, would, on application by letter, to Mr. Harvey, without doubt receive by return of post a copy of the regulations. We find room, however, to subjoin two paragraphs of information from the document. They are these:—

"Exemption to Practitioners.—It will be held equivalent to the curriculum prescribed in the three regulations foregoing, to have obtained, upon examination, a diploma or a licence, in medicine or in surgery, from an university or other authority established by law within the United Kingdom, and to have subsequently attended *medical classes in this university for one year.*

"Fees for Degrees.

"Bachelor of Medicine.—Expense of diploma, 1*l.*

"For Doctor of Medicine.—Expense of diploma, 1*l.* Government stamp, 10*l.* Together, 11*l.*

"There are no examiners' fees."

SHAM LECTURES.

To the Editor.—Sir: I shall feel especially favoured if, in your valuable Journal, you will publish an occurrence which, for aught I know, not being a regular student at King's College, may frequently take place there; it is at least extremely annoying, and is very well calculated to injure a new institution.

I went to the college on Tuesday, the 10th of October, to attend Mr. Rymer Jones's lectures on comparative anatomy, and paid the entrance fee of 4*l.* 4*s.* Upon entering the hall I was surprised to see a notice that these lectures would not commence until the 17th inst. Accordingly on that day I again sojourned thither, and after inquiring of the porter whether Mr. Jones would then lecture, was told that Mr. J. was in *the north of England*, and had not been seen for more than six months. The secretary of the college was applied to, but *he* knew nothing about the lectures. After waiting more than twenty minutes I, with two others, departed, Mr. Jones not having made his appearance. Had due notice of his absence been given, of course I could not complain, although an unnecessary walk some distance is not pleasant in wet weather. I am led to believe that very probably the same occurrence will take place on Saturday next, for I fear that the true cause is the lack of students, which, had I known, I could have gone elsewhere, for I am sorry to say that the hospital to which I have had the honour of belonging these four years, can only boast of a poor stick who, although he has during one session attempted to lecture, is quite unintelligible. I remain, Sir, your obedient servant,

An Old Student.

Oct. 17, 1843.

*** Of course our correspondent would promptly obtain again the fee on personally making these statements to the Dean of Faculty, or other proper authority, in the college. But what on earth could induce any "old student" to go to Mr. Rymer Jones for instruction in comparative anatomy when such a teacher as Professor Grant is lecturing on that subject?

NEWS OF THE WEEK.

The expenditure of the Royal Infirmary of Aberdeen has exceeded its income in 1840 by £454, in 1841 by £242, and in 1842 by £130. This diminution of expenditure over income does not arise from any increase in the income, which was, in fact, in 1842, £100 less than it was in 1841; but chiefly because the number of patients was not so large as in 1841, the average number during 1842 having been only 113 in place of 126. Thus was the expenditure diminished. The fever cases received, too, were considerably less during 1842 than during the previous two years, having been 1230 in 1840, and 466 in 1841, while in 1842 it was only 283. Under these circumstances the managers express their regret and surprise that the institution should experience so great a falling off in that popular source of its income, collections at the churches in the city and country parishes. Not many years since the income arising from that source alone was considerably above £1000, but for some time past it has scarcely exceeded £600. Although the managers have provided accommodation for an increased

number of patients, and the number of cases treated in the hospital has been on the increase for many years, yet there has been an almost steady diminution in the amount collected for its behoof and in the number of parishes from which collections have been received. The managers ascribe this decrease of subscriptions to the claims of the institution not being warmly enough urged on public attention. They express, in a report which has this week been published by them, "a confident anticipation that the public will not long suffer them to remain under the difficulties which a surplus expenditure necessarily tends to bring on such an institution." In the list of contributions we find one parish of Aberdeen (Spring Garden) subscribing the enormous sum of £1 6s. 7d.; and one congregation (that of the "Methodist chapel") the liberal amount of fifteen shillings.

At a meeting of the house-committee of the Westminster Hospital on Tuesday week last, after the ordinary business had been transacted, Mr. Miller, the chairman, drew attention to the absence of the assistant-surgeon, Mr. C. Guthrie. About three weeks since leave of absence was granted to Mr. Guthrie by the committee, but, owing to an oversight, no time was named for the absence to continue. He had, previously to obtaining this permission, been absent from his duties for two or three weeks. A long and desultory discussion took place, accompanied by several questions from various governors. "Did Mr. C. Guthrie mean to return?" "What was the cause of his absence?" "Were any reports that were in circulation respecting him true?" "Was any one already canvassing, *sub rosa*, on behalf of a candidate to succeed him, because Mr. G. was not expected to return?" Unsatisfactory answers, or none, were given to these inquiries, excepting as regarded the last, to which it was positively answered that no canvassing was at present going on. Some of the governors, however, said that they were so thoroughly disgusted with the manner in which elections had been carried of late in the hospital that they were determined that such disgraceful proceedings should not again occur. Already the institution had suffered severely from the present vicious system. Several motions were made, but the one which was carried by the casting vote of the chairman was to the effect that the time allowed for Mr. C. Guthrie's absence would expire on Tuesday, the 17th inst. This resolution was placed on the minutes with the view of its being communicated, if possible, to the absent officer, in order that the committee might ascertain what course they should adopt regarding the vacancy, if it occurred. The resolution caused much discussion. One party was desirous of extending the time to a month. A shorter period, it was urged, would be unfair to the subject of the motion, who might be on the Continent, and unable to return an answer before the 17th inst., the time originally having been unlimited. To these objections it was answered that the motion could only be regarded in the light of a "rule to show cause," and that if good cause for the absence were shown, then there would be no objection to extending the time; but if the reports were true that the assistant-surgeon would not return, then it was better to bring the matter at once to an issue, in order to defeat all discreditable proceedings on the part of scheming candidates for the vacant appointment.

On Tuesday last (the 17th) there was a large meeting of the house-committee at the Westminster Hospital, when, after a very lengthened discussion, Mr. C. G. Guthrie's leave of absence was extended to one month from that date.

The Westminster Medical Society hold their first meeting this evening (Saturday), at 32, Sackville-street, at 8, p.m., and the meetings will be continued regularly, during the session, on each succeeding Saturday.

Dr. Hughes Willshire has been elected Physician to the Royal Infirmary for Children in the Waterloo-road.

ROYAL COLLEGE OF SURGEONS IN LONDON.

List of gentlemen admitted members on Friday, October 13, 1843:—H. G. Noyes, T. Percival, J. B. Moxon, J. Gatis, E. J. Newcomb, W. H. Parsey.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who received certificates of qualification to practise as apothecaries, Thursday, Oct. 12, 1843:—Alfred Benjamin Andrews, Braburne, Ashford, Kent; Edward Tegart, London; John Spencer, Liverpool; Edward Thompson David Harrison, Welchpool; Robert Hockin Boodle, Chilcompton, Somerset; Martin Burnup, Newcastle-upon-Tyne.

CORRESPONDENTS.

A Constant Reader.—Probably nine men out of ten would say Mr. L., his publications having been the more numerous, and he himself, as a lecturer, much oftener noticed by the press; for he, of the two, has been the bolder man, both for his good deeds and his bad.

A notice to *E. C.* next week.

J. G., Student. He can, in any disease, external or internal.

The case related by *Mr. W. P. F. Brookes* shall appear next week.

The cases forwarded by *Mr. R. F. Wells* shall be inserted.